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TRILOBITA

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COMPILED BY

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II. TRILOBITA

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CONTENTS

	PAGE
I. TITLES	1
II. SUBJECT INDEX	9
III. SYSTEMATIC INDEX	14

I.—TITLES

Declaration 13. Rejection of the distribution of a paper in microfilm, or on a microcard or the like, as a method of "publication" for the purposes of Article 25 of the *Règles*. Opin. int. Comm. zool. Nom. 9 7 1954 : iii-xii.

Declaration 14. Clarification of the meaning of Rule (f) in Article 30 of the *Règles* (Rule relating to the type species of a nominal genus established to replace an earlier nominal genus). Opin. int. Comm. zool. Nom. 9 12 1955 : xv-xxiv.

Declaration 15. Clarification of the question of the nominal species to be regarded as eligible for selection as the type species of a nominal genus established without cited nominal species, in cases where a subsequent author, without citing such a species, gives a bibliographical reference to a work in which such a species is cited. Opin. int. Comm. zool. Nom. 9 18 1955 : xxvii-xxxv.

Declaration 16. Clarification of the question of the availability of a name having as its only "indication" a qualified synonymic reference to a previously published name. Opin. int. Comm. zool. Nom. 9 21 1955 : xxxix-xlvii.

Declaration 17. Clarification of the provision in the *Règles* relating to the conditions necessary to

establish a state of secondary homonymy between any two specific names. Opin. int. Comm. zool. Nom. 9 22 1955 : li-lix.

Declaration 18. Adoption of Rules relating to the making of entries on the *Official List of Family-Group Names in Zoology* and on the *Official Index of Rejected and Invalid Family-Group Names in Zoology*. Opin. int. Comm. zool. Nom. 6 15 1954 : iii-xix.

Declaration 19. Adoption of Rules relating to the making of entries on the *Official List of Specific Names in Zoology* and on the *Official Index of Rejected and Invalid Specific Names in Zoology*. Opin. int. Comm. zool. Nom. 6 16 1954 : xxiii-xxxix.

Direction 23. Addition to the *Official List of Family-Group Names in Zoology* or, as the case may be, to the *Official Index of Rejected and Invalid Family-Group Names in Zoology* of the family-group names involved in the cases dealt with in the *Opinions* included in volume 10 of the *Opinions and Declarations rendered by the International Commission on Zoological Nomenclature*. . . Opin. int. Comm. zool. Nom. 10 21 1955 : 495-510.

Opinion 231. Rejection for nomenclatorial purposes of Martin (W.), 1793, *Figures and Descriptions of Petrifications collected in Derbyshire* and of the work by the same author published in 1809 under the title

Petrificata Derbiensia. Opin. int. Comm. zool. Nom. **4** 21 1954: 241-247.

Opinion 279. Rejection, as of the status of a generic name, of any term placed between the generic name and the specific name of a species in the zoological works of Linnaeus and Fabricius (J. C.) (*Opinion* supplementary to *Opinion* 124). Opin. int. Comm. zool. Nom. **6** 11 1954: 181-187.

Opinion 296. Suppression, under the Plenary Powers, for nomenclatorial purposes, of volume 3 (*Regnum Lapideum*) of the Twelfth Edition of the *Systema Naturae* of Linnaeus published in 1768 and of the corresponding volume in the Houttuyn (1785), Gmelin (1793) and Turton (1806) editions of the above work. Opin. int. Comm. zool. Nom. **8** 13 1954: 169-178.

Opinion 350. Validation, under the Plenary Powers, of the generic name *Dionide* Barrande, 1847 (Class Trilobita). Opin. int. Comm. zool. Nom. **10** 17 1955: 453-462.

Opinion 352. Designation, under the Plenary Powers, of a type species consistent with the intention of the original author for the genus *Cummingella* Reed, 1942 (Class Trilobita), a genus based upon a misidentified type species. Opin. int. Comm. zool. Nom. **11** 2 1955: 27-46 pl. i.

Opinion 367. Addition to the *Official List of Generic Names in Zoology* of the generic names *Toernquistia* Reed, 1896 (Class Trilobita) and *Tornquistia* Paeckelmann, 1930 (Class Brachiopoda). Opin. int. Comm. zool. Nom. **11** 17 1955: 247-254.

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II.—SUBJECT INDEX

GENERAL LITERATURE AND HISTORY

Nomenclature (principles of).—**Opinion 279**, **Declarations 14-19**; Microfilm distribution not to constitute publication, **Declaration 13**; Rejection for nomenclatorial purposes of Martin 1793 and 1809, **Opinion 231**; Suppression of vol. 3 (*Regnum Lapideum*) of 12th edition of Linnaeus (1768), **Opinion 296**; "Taxion" and "Taxionomie" philologically more correct than "Taxon" and "Taxonomie", **Wolff, Richter (1)**; "Taxon" and "Taxonomie" preferred on grounds of priority, usage and euphony, **Hölder**; Authorship of taxa in Hawle & Corda's "Prodrom" discussed, **Opinion 350**; Reaffirmed that Corda

alone should be considered author of the "Prodrom", and Hawle's disavowal of responsibility accepted, **R. & E. Richter (4)**.

Additions to Official Lists.—*Dionide* Barrande 1847, **Opinion 350**; *Cummingella* Reed 1942, *Phillipsia* Portlock 1843, *Weberides* R. 1942, **Opinion 352**; *Toernquistia* Reed 1896, **Opinion 367**; *Dionididae* Gürich 1907, **Direction 28**.

General works.—Classification, **Hupé (4)**; Revision of the Tremadoc fauna of Hof originally described by Barrande 1868, **Sdzuy**; Upper Devonian Phacopidae, **R. & E. Richter (1)**; *Phillipsiinae*, **Fřibyl**; *Styginidae*, **Skjeseth**; Correlation of Scandinavian Middle Ordovician shelly and graptolite successions, **Jaanusson & Strachan**.

Text book.—Stratigraphical paleontology, **Neaverson**.

Popular work.—Ohio fossils, **La Rocque & Marple**.

Obituary.—G. T. Troedsson, **Troelsen, Wenner**.

Abstracts.—**DeLand, Durkee, Evitt, Gilman, Hintze (2), Huffman, Wilson (1)**.

Check lists.—Lower Cambrian trilobites in boulders from Quebec, **Rasetti**; Lower Cambrian fauna of N.W. Vermont, **Shaw (2)**.

Preservation.—Silicification, **Hintze (2)**.

Laboratory technique.—Casts in rubber latex, **Whittard**.

Museum Collections.—Barrande's 1868 types from Hof have been destroyed, neotypes of many spp. chosen, **Sdzuy**.

Revision of Nomenclature.—Validation of *Dionide* Barrande 1847 by suppression of *Polytomurus* Corda 1847, **Opinion 350**; Proposed validation of *Phillipsinella* Novák 1886 and suppression of its objective synonym *Phillipsella* Oehlert 1886, **Whittington (3)**; Emendation of *Scutellidae* R. & E. Richter 1925 non Gray 1825 to *Scutelluidae* proposed, **R. & E. Richter (2)**; *Boeckia* Brögger 1882 non Malm 1870 renamed *Boeckaspis*, **Henningsmoen**;

Irania King 1937 non de Filippi 1863 renamed *Iranoleesia*, **King**; Pilgrimiidae Hupé 1953 renamed Paracedariidae; *Metanomocare* Lermontova 1940 a synonym of *Coosia* Walcott 1911, *Neophillipsia* Gheyselinck 1937 of *Ditomopyge* Newell 1931, **Hupé** (4); *Blountina* Lochman 1944 a synonym of *Protillaenus* Raymond 1937, *Coleopachys* and *Greylockia* R. 1937 of *Meteoraspis* Resser 1935, *Hysteropleura* Raymond 1937 *Deltophthalmus* Resser 1938 *Deissella* Howell & Duncan 1939 and *Howellaspis* Lochman & Denson 1944 of *Bolaspidella* Resser 1937, *Megadunderbergia* Kobayashi 1939 of *Dunderbergia* Walcott 1924, *Mettisia* Resser 1937 and *Semnocephalus* R. 1942 of *Modocia* W. 1924, *Norwoodina* Lochman 1940 of *Holcacephalus* R. 1938, *Piedmontia* R. 1938 of *Bonneterrina* L. 1936, *Plethagnostus* Clark 1923 and *Rhaptagnostus* Whitehouse 1936 of *Pseudagnostus* Jaekel 1909, *Pseudolisania* K. 1935 of *Cheilocephalus* Berkeley 1898, *Whitfieldina* R. 1937 of *Norwoodia* W. 1916; revision of N. American *Tricrepecephalus*, only 3 spp. being recognised, **Palmer** (1); *Homoglossa* Raymond 1912 a synonym of *Bronteopsis* Nicholson & Etheridge 1879, **Skjeseth**; *Mesonacis* Walcott 1885 and *Paedeumias* W. 1910 synonyms of *Olenellus* Billings 1861, *Periomma* R. 1937, **Shaw** (2); *Micragnostus* Howell 1935 a synonym of *Geragnostus* H. 1935, *Grandagnostus* H. 1935 of *Leiaagnostus* Jaekel 1909, *Parapilekia* Kobayashi 1934 of *Pilekia* Barton 1915, *Pharostomatidae* Hupé 1953 of *Calymenidae* Milne Edwards 1840, **Sdzuy**; *Prokootenia* Lermontova 1940 probably a synonym of *Micmacca* Matthew 1895, **Lermontova** (1); *Psilaspis* Resser & Endo 1935 a synonym of *Manchuriella* R. & E. 1935; several of R. & E.'s 1937 spp. of various genera considered synonyms, **Endo** (1); *Salteraspis* [recte *Saltaspis*] Harrington & Leanza 1952 a synonym of *Jujuyaspis* Kobayashi 1936, *Triarthrinae* emend. H. & L. of *Oleninae*, **Kobayashi** (1); *Weberides* Reed 1942 and ? *Vidria* Weller 1944 synonyms of *Paladin* W. 1936, *Bollandia* *Paragriffithides* & *Particeps* R. 1943

possibly synonyms of *Griffithides* Portlock 1843, *Griffithidinae* *Ditomopyginae* & *Anisopyginae* Hupé 1953 synonyms of *Phillipsiinae* Oehlert 1886, **Přibyl**; *Battus nudus* Beyrich type of *Phalagnostus* gen. n. in view of doubt whether it can be considered type of *Phalacroma* Hawle & Corda, **Howell** (2); *Dalmanitina proeva* (Emmrich) and *D. socialis* (Barrande), **Prantl** (2); *Dalmaniopsis* Geinitz 1862 not a trilobite, **R. & E. Richter** (3).

Designation of type-species. — *Cummingella* Reed 1942—designation of *Phillipsia jonesii* Portlock 1843, **Opinion 352**.

Selection of lectotypes.—*Bergamia* ? *etheridgei* (Hicks), *Geragnostus maccayi* (Salter), *Stapeleyella murchisoni* (S.), **Whittard**; *Brachymetopus* (*Brachymetopina*) *woodwardi* Whidborne, **Goldring**; *Bronteopsis concentrica* (Linnarsson), *Raymondaspis nitens* (Wiman), **Skjeseth**; *Drevermannia* (*Eodrevermannia*) *nitida* Růžička, **Přibyl & Plas**; *Illaenus baffinlandicus* Roy, **Whittington** (1); *Megalaspis gigas* Angelin, *Niobe frontalis* (Dalman), **Bohlin**; *Teinistion lansi* Monke, **Kobayashi** (2).

Selection of neotypes. — *Bavarilla hofensis*, *Euloma geinitzi*, *Geragnostus bavaricus*, *Niobe* (*Niobella*) *innotata*, *Parabolina frequens*, *Pilekia discreta*, *Pterocephalina* (*Leimitzia*) *bavarica* (Barrande 1868 spp.), **Sdzuy**.

STRUCTURE

Terminology. — “Apodema” versus “appendifer”, **Richter** (2); “Branch furrow” separating occipital lobe from occipital ring, **Goldring**; Refined form of Bancroft’s notation for numbering the pits on the fringe in Trinucleids, **Whittard**; Summary of agnostid terminology, **Palmer** (2).

Segmentation. — Cephalic spines probably not developed from specific segments, **Kielan**.

Eye-ridges. — In Cheiruracea ridges appear to be connected primarily with the foremost glabellar furrows rather than with the anterior pits, **Sdzuy**.

Alae of Raphiophoridae considered to be not parts of the glabella, **Whittard**.

Cephalic sutures.—Richter's interpretation of the facial sutures and connective sutures as a primitive unit (and of the development of rostral and hypostomal sutures as a secondary condition) upheld, **Schindewolf**.

Facial sutures.—Reasoned rejection of the view that the facial suture is an intersegmental boundary, **Kielan**; Opisthoparian in phacopid *Bouleia*, **Hupé** (2); Interpreted as opisthoparian in encrinurid *Cybeloides virginensis*, **Hupé** (4); Proparian in *Cyclognathina* (Triarthrinae), **Lermontova** (3); Independent development of proparian sutures in different branches of late Pelturinae, **Kobayashi** (1); In the *schlosseri*-group of *Phacops* (*Cryphops*) and in *Phacops* (*Dianops*) of the Upper Devonian the suture becomes once more functional, **R. & E. Richter** (1).

Ventral sutures.—In *Redlichia noetlingi* there are connective sutures across the doublure, but neither a hypostomal suture nor a rostral suture, **Schindewolf**; Conjoined free cheeks described in *Parabolina*, suggesting fusion of ventral suture (or sutures), **Sdzuy**.

Cephalic spines.—General review of occurrence of marginal spines in larval and adult forms, and of their interpretation by various authors; the spines (often three pairs) of larval forms are probably adaptations to a pelagic habit, their disposition relative to the cephalon as a whole is purely functional, they bear no specific relation to individual segments, and they are not necessarily homologous in different forms (e.g. the 3 pairs in *Leptoplastus*, *Acanthoparypha* & *Olenelloides*), **Kielan**; Strong paired anterior "horns" on cranium of *Diceratocephalus* interpreted as procranial spines, **Lu**.

Genal spines.—In *Olenellus gilberti* genal spines claimed to be parial (not procranial), **Kielan**.

Pits.—Pits on cephalic fringes of several Trinucleids analysed and a modified notation for their number-

ing suggested; in *Myltonia* (probably the oldest known form) the disposition of the pits is haphazard, **Whittard**.

Terraced lines.—Relations to Panderian organs discussed, possible sensory function suggested, **Hupé** (1).

Cephalic doublure.—Subcranial furrow on doublure of *Piltonia*, **Goldring**.

Hypostome.—In *Redlichia noetlingi* the hypostome is fused to the cephalic doublure (there is no hypostomal suture); a flat crescentic plate between the central body of the hypostome and the doublure is interpreted as the hypostomal wing (rather than as an ankylosed rostral plate), **Schindewolf**.

Thoracic segments.—Structure of thoracic pleurae analysed in primitive Cheiruracea, **Sdzuy**.

Panderian organs.—Several morphological types distinguished, thin membrane illustrated in *Asaphus cornutus* which may be original covering of "orifice", latter considered not a true opening through test, function of organs as buttresses during enrolment reaffirmed, **Hupé** (1).

Pygidium.—**Kobayashi's** interpretation of the posterior part of the pygidial axial lobe of *Pseudagnostus* as a "pseudolobe" upheld, **Palmer** (2).

Lateral pygidial spines.—Spines in *Crepicephalus* and *Tricrepicephalus* considered to have evolved independently and not to indicate affinity, **Palmer** (1).

Appendages.—Recorded, **Sampey**.

Alimentary system.—*Tomaculum* as faecal pellets, **Péneau** (1); Part of presumed intestine described in *Illaenus*; support for interpretation of *Tomaculum* as faecal pellets of trilobites, **Péneau** (2).

Musculature.—Cephalic and pygidial muscle scars in *Geragnostus* and *Pseudagnostus*, **Palmer** (2).

PHYSIOLOGY AND SEX

Enrolment.—The “orifices” of Panderian organs may have acted as a warning mechanism during enrolment, organs themselves acted as buttresses, **Hupé (1).**

Sexual dimorphism. — Possible examples in *Protillaenus* (numbers of pygidial segments), *Cedaria*, *Cedarina* and *Aphelaspis* (occipital spine), *Coosellidae* (pygidial pleurae), **Palmer (1).**

DEVELOPMENT

Ontogeny. — Of *Damesellidae* discussed, **Kobayashi (2);** Pygidial ontogeny of *Pseudagnostus*, **Palmer (2);** Meraspis of *Ceraurus* with three pairs of marginal spines on the fixed cheek; discussion of significance of spines in ontogeny, **Kielan.**

Growth.—Effect of growth-changes on proportions of cranidia in *Ptychopariidae*, **Rasetti.**

EVOLUTION AND CLASSIFICATION

Phylogeny.—*Styginidae* may be descended from *Zacanthoids* (possibly through *Hemirhodon*) and be ancestral to *Illaenidae* & *Scutellidae*, **Skjeseth;** *Pilekiidae* probably ancestral to most *Cheiruracea*; *Pharostoma* may be close to the ancestors of both *Pharostoma* and *Calymene*, **Sdzuy;** Relations of Upper Devonian *Phacopinae*, **R. & E. Richter (1);** Relations within *Pelturinae*, the two proparian genera *Saltaspis* and *Nericaspis* being considered independent off-shoots, **Tjernvik;** Relations of subgenera of *Drevermannia*, **Fřibyl & Plas.**

Extinction. — Neither extrinsic causes (e.g. changes in environment) nor intrinsic causes (phylogeron-tism) satisfactorily explain the extinction of the *Phacopidae* at the end of the Devonian, **R. & E. Richter (1).**

Phylogeron-tism. — Development of proparian facial sutures in late *Olenidae* so attributed, **Kobayashi (1);** Considered not a satisfactory explanation of the extinction of the

Phacopidae since there is no morphological evidence of degeneration in the Upper Devonian forms, and since both long-established [*Phacops* (*Phacops*)] and newly-developed [*P. (Cryphops?)* & *P. (Dianops)*] stocks are affected, **R. & E. Richter (1).**

Reduction. — Suggested that Panderian organs when present at the front of the pygidium may be vestigial structures indicating descent from forms with one more segment in the thorax, **Hupé (1).**

Homeomorphy. — Glabellas of *Drevermannia* (*Eodrevermannia*) and *Calymene*, **Fřibyl & Plas.**

Biometry. — Measurements used to distinguish 2 spp. of *Aphelaspis*, linear relative growth relations plotted, **Palmer (1);** Regression lines calculated for two pairs of characters in *Geraagnostus*, **Palmer (2).**

Classification (principles of). — Among Upper Cambrian *Agnostidae* from Nevada the outline of the axial lobe of the pygidium is considered more stable (and therefore more suitable for the discrimination of subfamilies) than other characters such as the relative development of the dorsal furrows, **Palmer (2).**

Classification.—**Hupé (4);** Classification adopted into (i) *Polymera*, including *Redlichida*, *Corynexochida*, *Dikelocephalida*, *Conocoryphida*, *Burlingida*, and (ii) *Miomera*, including *Eodiscida* and *Agnostida*, **Kobayashi (1);** *Calymenidae* taken to include *Pharostoma* and family considered fundamentally opistho-parian; close relations postulated between *Remopleuridae* & *Richardsonellidae*, and between *Ceratopygidae* & *Asaphidae*, **Sdzuy;** Of *Ceratopygidae*, which are considered related to *Asaphidae* or *Taihungshaninae*, **Kobayashi & Ichikawa;** *Crepicephalidae* considered an unnatural assemblage, its members being redistributed into 2 new families *Coosellidae* & *Tricrepicephalidae*, **Palmer (1).**

ECOLOGY AND HABITS

Habits.—Introduction of term *paraplankton* for forms, such as trilobites, in black shale facies, which lead a

(postulated) swimming and floating life grazing on sea-meadows, **Kobayashi** (1); In Middle and Upper Ordovician limestones of Sweden the proportion of arthropods (trilobites and ostracods) among the shell fragments shows an inverse correlation ($r = -0.83$) with the percentage of insoluble residue, **Martna**; Luma-chelles made up of remains of a single species (e.g. of *Scutellum paliferum* in Lower Devonian limestones in Bohemia) interpreted as accumulations of moult-fragments, **Chlupáč** (2).

Migration. — General discussion of Lower Ordovician faunas and correlation; *Parabolinella*, *Peltura* and *Telephus* recorded from British Columbia, **Kobayashi** (1); L. & M. Devonian faunas of Sahara contain elements from Europe, N. America (e.g. *Coronura aspectans*), and Bolivia, **Le Maître** (2); Scandinavian genus *Proceratopyge* in *Chuangia* fauna of Manchuria, **Kobayashi & Ichikawa**; *Lotagnostus* recorded for the first time from western N. America, **Palmer** (2); German genus *Mephiargues* from Middle Devonian of Australia, **Edgell**; In Nevada a fauna with elements similar to the *Hungaria magnifica* fauna of Quebec is assigned to the Franconian, **Palmer** (2).

Teratology. — Damaged brim in *Harpes*, **Prantl** (1).

DISTRIBUTION AND FAUNAS

Cambrian. — China (Shan-tung), **Kobayashi** (2); Manchuria, **Endo** (1), (2); Manchuria, China (Shan-tung), **Hupé** (4); Persia, **King**; Spain (Castilla la Vieja), **Sampelayo**.

Cambrian (Lower). — Canada (Quebec [in boulders], British Columbia), U.S.A. (Vermont), **Rasetti**; Greenland (Ella I.), **Poulsen & Rasmussen**; Pakistan (Salt Range), **Schindewolf**; Spitzbergen, **Winsnes**; U.S.A. (Vermont), **Shaw** (2); U.S.S.R. (Siberia), **Lermontova** (1); U.S.S.R. (Siberia), **Zelenov, Zhuravleva & Korde**.

Cambrian (Lower & Middle). — Morocco (Anti-Atlas), **Hupé** (3).

Cambrian (Middle). — Argentina, **Rusconi** (1); Bohemia, **Howell** (2); Czechoslovakia, **Havlíček & Šnajdr**; France (Aude), **Astre**; Norway (Oslo), **Spjeldnaes**; U.S.A. (California), **Stoyanow & Susuki**; U.S.S.R. (Kazakhstan), **Lermontova** (1); U.S.S.R. (Turkestan), **Lermontova** (2).

Cambrian (Middle & Upper). — Argentina (Mendoza), **Rusconi** (3), (4), (5); U.S.A. (Montana), **McMannis**; U.S.A. (Wyoming), **Durkee**.

Cambrian (Upper). — Argentina (Mendoza), **Rusconi** (2); China (Inner Mongolia), Manchuria, **Lu**; Manchuria (Liaotung), **Kobayashi & Ichikawa**; Persia, China (Yun-nan), U.S.A., **Hupé** (4); Sweden, **Lindström**; Sweden (Nerike), **Tjernvik**; U.S.A. (Montana & Idaho), **Scholten et al.**; U.S.A. (Nevada), **Palmer** (2); U.S.A. (N. Mexico), **Kelley & Silver, Flower**; U.S.A. (Texas), **Cloud & Barnes, Palmer** (1), **Wilson** (1), (2); U.S.A. (Vermont), **Gilman**; U.S.A. (Wyoming), **Okulitch & Bell, DeLand**; U.S.S.R. (Kazakhstan & Siberia), **Lermontova** (3).

Ordovician. — Argentina (Mendoza), **Rusconi** (2), (4); Britain (Shropshire, Wales, Scotland), Bohemia, Peru, **Whittard**; Czechoslovakia, **Havlíček & Šnajdr**; France (Maine-et-Loire), **Dupuis**; Greenland (Ella I.), **Poulsen & Rasmussen**; Scandinavia, **Skjeseth**; Spain (Bada-joz), **Linares Rodríguez**; U.S.A. (Texas), **Wilson** (2).

Ordovician (Tremadoc). — Britain (W. England), **Curtis**; China (Tien-Shan), France (Hérault), **Hupé** (4); Germany (Hof in Bavaria), **Sdzuy**; Morocco (Anti-Atlas), **Chou-berth, Hindermeier & Hupé**; Sweden, **Tjernvik**; U.S.A. (Vermont), **Shaw** (1).

Ordovician (Lower). — Argentina (Mendoza), **Rusconi** (5); Germany, **Hundt**; Manchuria, **Endo** (1), (2); Sweden, **Lindström**; Sweden (Dalar-na), **Jaanusson & Mutvei**; Sweden (Öland), **Bohlin**; U.S.A. (Idaho), **Hupé** (4); U.S.A. (N. Mexico), **Flower**; U.S.A. (Texas & Colo.), **Cloud & Barnes**; U.S.A. (Utah), **Hintze** (1); U.S.A. (Wyoming), **Durkee**.

Ordovician (Lower & Middle).—Canada (British Columbia), Argentina, Kobayashi (1); U.S.A. (Utah & Nevada), Hintze (2).

Ordovician (Middle). — Britain (N. Wales), Whittington (2); Canada (Ontario), Whittington (1); Canada (Quebec), Clark & Strachan; France (Maine-et-Loire), Péneau (2); Norway (Oslo-Asker), Hagemann & Spjeldnaes; Scandinavia, Jaanusson & Strachan; U.S.A. (Minnesota), Weiss; U.S.A. (Missouri), Howell (1); U.S.A. (New York), Evitt.

Ordovician (Middle & Upper).—Canada (Manitoba), Baillie; Sweden, Martna.

Ordovician (? Upper). — Canada (Baffin I.), Whittington (1).

Ordovician (Upper). — Britain (Scotland), Hupé (4); Canada (Baffin I.), Fortier; Czechoslovakia (Bohemia), Röhlich & Chlupáč, Marek (1), (2); Poland (Lysa Gora), Kielan; U.S.A. (Iowa), Tasch.

Silurian. — Australia (N.S.W.), Crook; Britain (W. England), Curtis, Lawson; Czechoslovakia (Bohemia), Svoboda & Prantl (1).

Silurian (Lower). — U.S.A. (N.Y.) and Canada (Ontario), Fisher.

Silurian (Upper).—Britain (Wales), Straw; Czechoslovakia, Bouček & Přibyl, Chlupáč (1), (2), Horný, Růžicka & Bouška, Svoboda & Prantl (2), (4); French West Africa (Adrar), Le Maitre (3).

Devonian. — Czechoslovakia, Svoboda & Prantl (1), (3), (4).

Devonian (Lower). — Czechoslovakia, Chlupáč (2), Prantl (1), Svoboda & Prantl (2); France (Anjou), Pillet (2); France (Maine-et-Loire), Pillet (1); U.S.A. (New York), Ruedemann.

Devonian (Lower & Middle).—Germany (Rhineland), Krömmelbein et al.; Sahara, Le Maitre (2).

Devonian (Middle). — Australia (N.S.W.), Edgell; Czechoslovakia (Bohemia), Přibyl & Plas; Germany (Rhineland), Glinski, Struve; Sahara, Le Maitre (1); U.S.A. (New York), Kindle & Eidman.

Devonian (Upper).—Britain (W. England), Goldring; Germany, Rabien, R. & E. Richter (1); U.S.A. (Montana & Idaho), Scholten et al.

Carboniferous. — Czechoslovakia, Přibyl; U.S.A. (Wyoming), Shaw & Bell.

Carboniferous (Lower). — Britain (Wales), Owen & Jones; Britain (W. England), U.S.S.R., Goldring; Eire (Sligo etc.), Oswald; Spain (Asturias), Linares Rodríguez; U.S.A. (N. Mexico), Kelley & Silver; U.S.A. (Ohio), Hyde; U.S.A. (Oklahoma), Huffman; U.S.S.R. (Urals), Einor.

Carboniferous (Upper). — U.S.A. (Nevada), Dott.

Permian. — Bohemia, R. & E. Richter (3).

Revision of horizon.—Fauna from U.S.A. (Vermont) described by Shaw 1951 [recorded Z.R. 88 11 title 61] as Upper Cambrian now considered to be Ordovician (Tremadoc) in age, Shaw (1).

III.—SYSTEMATIC INDEX

N.B.—Since all the species of the group are fossil, the † used elsewhere in the Zoological Record to indicate fossils is here omitted.

Acanthaloma lochkovens Ptl & Přib., A. sp. p. 314, Chlupáč (1).

Acanthaloma lochkovens Ptl & Přib. p. 212, A. (*Kettneraspis*) *pigra* (Barr.) p. 219, Svoboda & Prantl (1).

Acanthaloma lochkovens Prantl & Přibyl p. 385, A. *hoernes* (Barr.) p. 388, A. (*Kettneraspis*) *derelicta* (B.) p. 389, Svoboda & Prantl (2).

Acanthaloma (Acanthalomina) minuta (Barr.) p. 525, A. *lochkovens* Prantl & Přibyl p. 529, A. *ruderalis* (Hawle & Corda) p. 533, A. *hoernes* (B.) p. 534, Svoboda & Prantl (4).

Acanthaloma ruderalis, A. *truncata*, A. *laportai* (H. & C. spp.), A. *hoernes* (Barr.) listed p. 154, A. *lochkovens* Ptl & Přib. p. 151, Chlupáč (2).

Acanthalomina see *Acanthaloma*.

Acantholoma (*A.*) *lochkovens* Ptl. & Přib. p. 334, *A.* (*A.*) *leonhardi* (Barr.) p. 355, *A.* (*A.*) *roemeri* (B.) p. 379, *A.* sp. p. 347, *A.* (*Acantholomina*) *minuta* (B.) p. 349, **Horný**.

Acantholoma (*Acantholomina*) *minuta* (Barr.) p. 580, *A.* (*Acantholoma*) *leonhardi* (B.) p. 581, **Bouček & Přibyl**.

Acantholomina see *Acantholoma*.

Acanthopyge see *Lichas*.

Acanthopyge (*Mephiarges*) *bifida* sp. n. Devonian (Middle) Australia (N.S.W.) p. 138 pl. xiv figs. 1-8, pl. xv figs. 1-6 (reconstructions), **Edgell** Paläont. Z. **29** 3-4 1955.

Acanthopyge haueri (Barr.) p. 438, **Svoboda & Frantl** (3).

Acanthopyge parvula (Nov.) p. 154, **Chlupáč** (2).

Acaste sp. (*nolens* group) p. 22, **Krömmelbein et al.**

Acerocare angustifrons sp. n. p. 19 pl. v figs. 10-11 Cambrian (Upper) U.S.S.R. (Kazakhstan), **Lermontova** Upper Cambrian trilobites and brachiopods from Boshche-Kulya, 1951.

Acerocare ecorne Angelin text-fig. 1 C, **Tjernvik**.

Acidaspidae see *Acidaspides* gen. n.

Acidaspides gen. n. [Acidaspidae], *A. precurrens* sp. n. p. 27 pl. vi figs. 4-9 Cambrian (Upper) U.S.S.R. (Kazakhstan), **Lermontova** Upper Cambrian trilobites and brachiopods from Boshche-Kulya, 1951.

Acidaspis see *Ceratocephala*.

Acidaspis hystrix of Elles 1922 (p. 145) referred to Odontopleuridae gen. indet. p. 425, **Whittington** (2).

Acidaspis pectinifera? Barr., *A.* (*Trapelocera*) *verneuli* B., *A.* sp. (near *leonhardi* B.) p. 2, **Růžicka & Bouška**.

Acidaspis sp. p. 218, **Straw**.

Acrocephalites ? *vulcanus* of Walcott 1916 pl. 26 fig. 2 referred to *Periomma typicalis* p. 797, **Shaw** (2).

Actinopeltis globosa (Barr.) p. 3, **Röhlich & Chlupáč**.

Aculeodiscus bohemicus bohemicus Šnajdr p. 186 ff., **Havlíček & Šnajdr**.

Adastocephalus Mitchell 1919 may belong to Phacopidellinae p. 240, **Hupé** (4).

Agnostidae see *Neoagnostus* and *Hyperagnostus* gen. n.

Agnostids (indeterminable) p. 109 ff., **Spjeldnaes**.

Agnostinae (McCoy 1849)—*Geragnostus* Howell 1935 referred, hence Geragnostidae a synonym p. 14, **Sdzuy**.

Agnostus bavaricus Barrande referred to *Geragnostus* p. 14, **Sdzuy**.

Agnostus calvus listed p. 5, **Curtis**.

? *Agnostus cuyanus* Rusc. p. 8, **Rusconi** (5).

Agnostus hirundo Hicks 1875 [so attributed], *A. maccoyi* Salter, and *A. caducus* Barrande referred to *Geragnostus*; *A. morea* Salter (with synonym *A. perrugatus* B.) to *Corrugatagnostus*, *A. p.* of Reed 1903 to *C. sol* sp. n., *A. bohemicus* (Novák) to *Leiagnostus*, **Whittard**.

Agnostus hoiformis Kobayashi p. 109, *A. douvillei* Bergeron, *A. damesi* Resser & Endo p. 110, **Endo** (2).

Agnostus koerferi Monke 1903 a synonym of *Pseudagnostus douvillei* (Bergeron 1899), *A. pii* Airaghi 1902 probably also a synonym p. 90, **Kobayashi** (2).

Agnostus laevigatus records of Brögger 1882 discussed pp. 111, 115, **Spjeldnaes**.

Agnostus nodai sp. n. p. 59 pl. i figs. 13-14 Cambrian (Middle) Manchuria, *A. hoiformis* Kobayashi p. 9, *A. viator* Resser & Endo p. 11, *A. damesi* R. & E. p. 15, *A. comes* R. & E. p. 17, *A. chiushuensis* K. p. 25, *A. douvillei* Bergeron p. 10, *A. ozakii* R. & E. p. 20, **Endo** Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

"*Agnostus*" *nordicus* Lochman and synonym "*A.*" *valentinus* L. referred to *Pseudagnostus* ? [quod vide] p. 721, **Palmer** (1).

Agnostus tumidosus Hall & Whitfield referred to *Geragnostus* [quod vide] not to *Homagnostus* p. 89, *A. communis* H. & W. with synonym *A. neon* H. & W. to *Pseudagnostus* p. 94, *A. prolongus* H. & W. also to P. p. 98, Palmer (2).

Agrauloidae — *Micragraulidae* referred p. 94, Hupé (4).

Agraulopsis Růžicka 1939 referred tentatively to *Ptychopariinae* p. 108, Hupé (4).

Agraulos cf. *acuminatus* (Brøgger) p. 115, Spjeldnaes.

Agraulos namanensis Lermontova nom. nud. see *Namanoia namanensis* gen. et sp. n.

Aguaraya gen. n. [Oryctocephalidae], *A. acutispina* sp. n. p. [2] text-fig. 2 Cambrian (Middle) Argentina, Rusconi Bol. paleont. B. Aires No. 29 1954.

Aguaraya acutispina Rusc. p. 62 pl. i fig. 2, Rusconi (5).

Aidarella gen. n. [Incertae sedis], *A. vigilans* sp. n. p. 29 pl. v figs. 1, 1a, 2, 3, pl. i fig. 1 pars B Cambrian (Upper) U.S.S.R. (Kazakhstan), Lermontova Upper Cambrian trilobites and brachiopods from Boshche-Kulya, 1951.

Alceste hisingeri (Barr.) p. 9, Röhlich & Chlupáč.

Aldonaia Lermontova 1940 discussed, *A. ornata* L. refigured p. 144 pl. xviii figs. 5, 5a-e, Lermontova (1).

Alokistocare ? *asiatica* sp. n. p. 19 pl. ii fig. 10 Cambrian (Middle) U.S.S.R. (Turkestan), Lermontova Middle Cambrian trilobites and gastropods from Shody-Mira, 1951.

Amecephalus cormoranus sp. n. p. 4 [unillustr.] Cambrian (Middle) Argentina (Mendoza), Rusconi Bol. paleont. B. Aires No. 32 1955.

Amecephalus cormoranus Rusc. illustrated p. 23 pl. i fig. 7, *A. mendozanus* R. p. 8, Rusconi (5).

Amechilus Ross 1951 discussed and referred to *Emmerichellidae* [sic], *A. tuberculatus* sp. n. Ordovician (Lower) Canada (B.C.) p. 459 pl. vi fig. 11, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Ameura Weller 1936 referred to *Phillipsiinae* p. 409, Přibyl.

Amphitryon see *Amphytrion*.

Amphitryon radians (Barr.) pp. 9, 10, Röhlich & Chlupáč.

Amphoton deois (Walcott) recorded —following considered synonyms *Bathyriscus asiaticus* Lorenz, *A. steinmanni* L., *A. parallela*, *A. alia* & *A. divergens* Resser & Endo 1937 spp. p. 60; *A. sp.* listed p. 15, Endo (1).

Amphoton deois (Walcott) p. 110, Endo (2).

Amphoton deois (Walcott) hypostome p. 94 pl. xiv figs. 13a-b, *A. (Sunia) tellus* (W.) p. 94 pl. xiv figs. 10-11, Kobayashi (2).

Amphytrion [sic] *radians* (Barr.) p. 237, Marek (1).

Ampyx Dalman 1827 referred to *Raphiophorinae* p. 261, Hupé (4).

Ampyx nasutus Dalm. p. 128, *A. cf. n.* p. 116, Bohlin.

Ampyx salteri Hicks syntype figured p. 15 pl. i figs. 15-21, *A. linleyensis* sp. n. Ordovician (Middle) Britain (Shropshire) for *A. s.* of La Touche 1884 and *A. mammillatus austini* of Whittard 1940 p. 18 pl. ii figs. 1-8; *A. nudus* (Murchison) [does not occur in Shropshire p. 20] type of *Cnemidopyge* gen. n. p. 21 to which are referred *A. bisectus* Elles and provisionally *A. costatus* Boeck [discussed p. 18]; *A. domatus* referred tentatively to *Lonchodomas*, records of Greenly 1919 & Fearnside 1905 excluded p. 17; *A. aldonensis* Reed and *A. acus* Troedsson referred to *Ampyxina* p. 25; *A. austini* Portlock lectotype lost p. 20n, Whittard Palaeontogr. Soc. [Monogr.] 109 1955.

Ampyx walcotti sp. n. p. 469 pl. viii figs. 1a-b, 2a-b, 3, *A. walcotti* var. *stenorachis* var. n. p. 470 pl. viii figs. 4a-b, 5, *A. a* sp. nov. p. 470 pl. viii figs. 21-23, *A. b* sp. nov. p. 471 pl. viii figs. 18-20 Ordovician (Lower & Middle) Canada (B.C.), Kobayashi J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Ampyx ind. sp. p. 421 pl. xl fig. 97, Whittington (2).

Ampyx n. sp. [undescri.] aff. *costatus* (Boeck) p. 11, JAANUSSON in Jaanusson & Mutvei.

Ampyxina Ulrich 1922 referred to Raphiophoridae (Ampyxininae) subfam. n. p. 261, Hupé (4).

Ampyxina wothertonensis sp. n. Ordovician (Middle) Britain (Shropshire) p. 24 pl. iii figs. 1-4; *A. aldensis* (Reed), *A. pygmaea* (R.) & *A. acus* (Troedsson) so referred p. 25, Whittard Palaeontogr. Soc. [Monogr.] 109 1955.

Ampyxininae subfam. n. [Raphiophoridae] p. 261 for *Ampyxina* and *Raymondella*, Hupé Ann. Paléont. 41 1955.

Anabaraspis gen. n. [Protolenidae] p. 91 for type *A. splendens* sp. n. p. 92 pl. xiii figs. 1, 1a-g, *A. cylindricus* [cylindricum on p. 172] sp. n. p. 93 pl. xiii fig. 2 Cambrian (Lower) U.S.S.R. (Siberia), Lermontova Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Anacheirus Reed 1896 referred to Pilekiidae fam. n. p. 42, Sdzuy.

Anataphrus gen. n. [Asaphidae] p. 141 for type *A. borraeus* sp. n. Ordovician (? Upper) Canada (Baffin I.) p. 142 pl. lxiii figs. 1-5; following spp. referred to *A.—gigas* Raymond 1920, *vigilans* Meek & Worthen 1870, *raymondi* Troedsson 1928, Whittington Mem. geol. Soc. Amer. No. 62 1954.

Anchiopsis anchiops (Hall), *A. anchiops* var. *sobrinus* (H.) p. 184, Kindle & Eidman.

Anisopyge Girty 1908 referred to Phillipsiinae p. 409, Fribyl.

Anisopyginae Hupé 1953 a synonym of Phillipsiinae p. 409, Fribyl.

Ankoura Resser 1938 referred to Kingstoniinae, *A. cf. A. apicalis* Duncan [cranidium described] p. 724 pl. lxxix figs. 10-11, Palmer (1).

Ankoura guatana sp. n. p. 4 [unillustr.] Cambrian (Upper) Argentina (Mendoza), Rusconi Bol. paleont. B. Aires No. 31 1955.

Ankoura guatana Rusc. illustrated p. 38 pl. iii fig. 6, Rusconi (5).

Anomocare alcione Walcott 1913 type of *Psilaspis* (*Entorachis*) subgen. n. p. 94, Kobayashi (2).

Anomocare sp. 1 (sp. nov.) p. 13 pl. iii figs. 1-5, *A.?* sp. 2 p. 15 pl. iii figs. 6-8 Cambrian (Middle) U.S.S.R. (Turkestan), Lermontova (2).

Anomocarella deflecta Endo, *A. orientalis* E., *A. tumida* E. p. 110, Endo (2).

Anomocarella distincta Resser & Endo—following R. & E. 1937 spp. of *A.* considered synonyms *walcotti*, *rara*, *blackwelderi*, *truncata* p. 84; *A. deflecta* sp. n. p. 85 pl. ii figs. 16-20, *A. puteata* sp. n. p. 85 pl. iii fig. 1, *A. tumida* sp. n. p. 86 pl. ii figs. 10-15 Cambrian (Middle) Manchuria; *A. macar* Walcott a synonym of *Manchuriella subquadrata* (Dames) p. 87, *A. temenus* W. referred to *Manchuriella* [quod vide] p. 87; *A. elongata* R. & E. p. 11, *A. orientalis* E. p. 21, *A. cfr. o.* p. 38, *A. huoliensis* E. p. 40, Endo Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Anomocarellidae — *Kotuia* Kobayashi tentatively referred p. 100, Hupé (4).

Anomocaridae Poulsen 1927 discussed, resemblances to Dikelocephalidae may indicate convergence not affinity, classified into Anomocarinae, Paracoosiinae, Dikelocephalininae & Hungaiinae p. 36, Sdzuy.

Anomocarinae (Poulsen 1927) discussed and taken to include *Anomocare*, *Lioparia*, *Anomocarina* & *Anomocarioides* p. 37, Sdzuy.

Antagminae Hupé 1953 discussed & considered a subfamily of Ptychopariidae to include the Lower Cambrian forms *Antagmus*, *Austinvillia*, *Bicella* gen. n., *Crassifimbria*, *Eoptychoparia* gen. n., *Luxella* gen. n., *Onchocephalus*, *Periomma*, *Piazella*, *Poulsenia*, *Proliostracus*, *Sombrerella*, *Syspacephalus*, and possibly the Middle Cambrian *Arellanella*, *Caborcella* etc. p. 9, Rasetti.

Antagminae genus and species undetermined p. 27 pl. vi figs. 16-18 Cambrian (Lower) Canada (Quebec) [in boulders], Rasetti.

Antagmus Resser 1936 discussed pp. 5, 9, *A. gigas* sp. n. p. 10 pl. i fig. 1 (drawing), pl. ii figs. 1-8, *A. elongatus* sp. n. p. 11 pl. ii figs. 11-16, *A. ? longifrons* sp. n. age less certain p. 12 pl. vi figs. 12-15 Cambrian (Lower) Canada (Quebec) [in boulders]; *A. solitarius* Lochman referred to *Onchocephalus* p. 16, **Rasetti** *Smithson. misc. Coll.* **128** 7 1955.

Antagmus discussed p. 778, *A. ? simplex* Resser 1937 and *A. typicalis* R. p. 776, **Shaw** (2).

Antatlasia recorded p. 972, **Hupé** (3).

Aojia spinosa Resser & Endo 1937 [so dated] with synonyms *A. pechiliensis* restr., *A. luna* & *A. yentaiensis* R. & E. spp.; *A. crassa* & *A. fracta* R. & E. names "withdrawn" [considered nomina dubia]; *A. reflexa* sp. n. including in synonymy *A. pechiliensis* R. & E. 1937 *partim* (pl. 47 fig. 34) and *Proasaphiscus* sp. R. & E. p. 64 pl. ii figs. 6-9, *A. angustata* sp. n. p. 65 pl. i figs. 9-12, *A. divergens* sp. n. p. 65 pl. ii fig. 5, *A. tumida* R. & E. p. 65 pl. i figs. 15-16, pl. ii figs. 1-4, *A. ? triangulata* sp. n. p. 66 pl. viii fig. 1 Cambrian (Middle) Manchuria, *A. depressa* Endo p. 11, *A. ? punctata* R. & E. p. 20, *A. quadrata* R. & E. p. 22, **Endo** *Bull. cent. nat. Mus. Manchoukuo* No. 7 1944.

Aojia spinosa Resser & Endo p. 110, **Endo** (2).

Apatokephalus Brögger 1896 referred to Richardsonellidae, *A. asarkus* sp. n. p. 25 pl. v figs. 22-24, ?25, text-figs. 21-23 Ordovician (Tremadoc) Germany (Hof), **Sdzuy** *Abh. senckenb. naturf. Ges.* No. 492 1955.

Apatokephalus canadensis Kobayashi p. 414 pl. ii fig. 2, **Kobayashi** (1).

Aphelaspis Resser 1935 discussed p. 743, *A. constricta* sp. n. p. 745 pl. lxxxiv fig. 11, *A. longifrons* sp. n. p. 745 pl. lxxxiv figs. 9, 12, pl. lxxxv figs. 2, 3, *A. spinosa* [spinosis on p. 780] sp. n. p. 746 pl. lxxxiv fig. 10 Cambrian (Upper) U.S.A. (Texas), *A. walcotti* Resser [differences from *A. spinosa* may be sexual] with synonyms *A. depressa* Bridge (non

Shumard) and *A. hamblenensis* R. p. 746 pl. lxxxiv figs. 2, 4-8; *A. quadrata* R. with synonym *A. laza* R. referred to *Labiostria* gen. n., *A. camiro* (Walcott) [possibly a new gen.] and *A. wyomingensis* (Miller) excluded from *Aphelaspis* p. 744, **Palmer J. Paleont.** **28** 6 1955.

Arapahoia sp. p. 1394, **McMannis**.

Arcuolimbus gen. n. [Llanosaspidae] for type *A. convexus* sp. n. Cambrian (Upper) U.S.A. (Texas) p. 735 pl. lxxxiii figs. 1, 2, 4, **Palmer J. Paleont.** **28** 6 1955.

Arellanella may belong to Antagminae p. 9, **Rasetti**.

Aristoharpes ? rotundus sp. n. p. 129 pl. iii figs. 5-7 Ordovician (Lower) Sweden (Öland), **Bohlin** *Bull. geol. Instn Univ. Upsala* **35** 1955.

Asaphellus Callaway 1877—*Hemigyraspis* [Raymond 1910] a synonym p. 436, *A. ? canadensis* sp. n. Ordovician (Lower) Canada (B.C.) p. 438 pl. v figs. 1-3, **Kobayashi J. Fac. Sci. Tokyo Univ.** [2] **9** 1955.

Asaphellus nearly identical with *A. homphrayi* [sic] Salter recorded from Tremadoc of Morocco p. 1593, **Choubert, Hindermeier & Hupé**.

Asaphellus orientalis Endo p. 108, **Endo** (2).

Asaphid gen. et sp. indt (a) pl. viii fig. 14, gen. et sp. indt (b) pl. viii fig. 8, gen. et sp. indt (c) pl. viii fig. 11 Ordovician (Lower) Canada (B.C.) all pygidia [undescri.] p. 436, **Kobayashi** (1).

Asaphidae see *Anataphrus* gen. n.

Asaphidae Burmeister 1843 discussed, *Symphysurinae* subfam. n. [quod vide] p. 426, **Kobayashi** (1).

Asaphidae considered related to Ceratopygidae p. 21, **Sdzuy**.

Asaphidae — Macropyginae referred p. 201, **Hupé** (4).

Asaphinae — *Protopresbynileus* Hintze 1954 referred p. 446, **Kobayashi** (1).

Asaphiscidae see *Hsiaoshia* gen. n.

Asaphiscidae Raymond 1924 — Shaw's 1952 classification used p. 721, **Palmer** (1).

Asaphiscidae classified into Asaphiscinae and Lecanopleurinae subfam. n. [quae vide] p. 136, **Hupé (4)**.

Asaphiscidae considered not closely related to Ceratopygidae p. 21, **Sdzuy**.

Asaphiscidae — *Hyperbolochilus* referred p. 422, **Kobayashi (1)**.

Asaphiscinae nov. as a subfamily of Asaphiscidae for *Proasaphiscus*, *Asaphiscus*, *Blainia*, *Modocia*, *Wilbernia* and *Dunderbergia* p. 136, **Hupé (4)**.

Asaphiscus kobayashii Resser & Endo a synonym of *A. bassleri* R. & E. p. 84; *A. walcotti* R. & E. listed p. 24, *A. tsutsumii* E. p. 34, *A. peiensis* R. & E. p. 36, **Endo (1)**.

Asaphiscus walcotti Resser & Endo p. 110, **Endo (2)**.

Asaphoidae — reference of Remopleurididae suggested tentatively p. 701n, **Hupé (1)**.

Asaphopsis Mansuy recorded from Tremadoc of Morocco p. 1593, **Choubert, Hindermeier & Hupé**.

Asaphopsoides gen. n. [nom. nud. 1953] [Hungaidea (Dikelocephalinae)] p. 173 for type *Dicellocephalus? villebruni* Bergeron text-fig. 167 (3) Tremadoc France (Hérault), **Hupé** Ann. Paléont. 41 1955.

Asaphus cornutus Pand. illustrations of Panderian organs pl. xxix figs. A, B, pl. xxx fig. 1, text-figs. 1c, 4 b-c, 6 b, 7 c, 8 b, *A. lepidurus* Nieszk. text-fig. 2c, **Hupé (1)**.

"*Asaphus*" cf. *A. curiosus* Billings p. 362, **Cloud & Barnes**.

Asaphus limbatus Rusconi 1946, *A. ? inezsulcatus* R. 1946, *A. ? asperoensis* R. 1952, *A. ? acequionensis* R. 1954: all referred to *Glossopleura* p. [2], **Rusconi (1)**.

Asaphus ludibundus Törnquist p. 237, **Martna**.

Asaphus (*Neoasaphus*) *platyrus* *platyrus* Ang. p. 11 ff. text-fig. 2, *A. (N.)* p. [s.l.] p. 12 ff., *A. (N.) demissus* Törnq. p. 11, *A. (N.)* sp. p. 15 ff., **JAANUSSON in Jaanusson & Mutvei**.

Asaphus "*raniceps*" p. 115, *A.* sp. p. 116, *A. (Neoasaphus) sulevi* cf. *knyrkoi* Fr. Schmidt [det. Jaanusson] p. 138 pl. iv fig. 5, **Bohlin**.

Asaphus wirthi Barrande 1868 (figs. 22-26, ? figs. 27-28) a synonym of *Niobe (Niobella) innotata* (B. 1868) p. 22, **Sdzuy**.

Asaphus sp. p. 81, **Hundt**.

Asiptychaspis ceto (Walcott) p. 19, *A. asiatica* (Resser & Endo) p. 32, **Endo (1)**.

Asteropyge Upper Devonian forms discussed p. 70 text-fig. 2, *A. (A.) lobispina* nom. nud. p. 70, **R. & E. Richter (1)**.

Asteropyge (*Asteropyge*) *jonesi* (Oehlert), *A. (A.) michelini* (Rouault), *A. (A.) munieri* (O.), *A. (Metacanthus) barrandei* (O.) listed pp. 16-17, *A. (M.) andegavensis* (Pillet) p. 21, *A.* sp. p. 22, **Pillet (2)**.

Asteropyge ostiolati n. sp. [nom. nud.] p. 313, **R. & E. Richter in Struve**.

Asteropyge pectinata Roemer p. 151 pl. xxi fig. 13, *A.* group *michelini* Rouault p. 152 pl. xxi figs. 11-12, *A. mesocristata* sp. n. Devonian (Middle) Algeria (Sahara) p. 153 pl. xx figs. 24-26, *A. (Comura)* sp. p. 154 pl. xxi fig. 17, **Le Maître** Matér. Carte géol. Algér. [1] No. 12 1952.

Asteropyge sp. p. 19, **Krömmelbein et al.**

Astycoryphe gracilis (Barr.) p. 154, **Chlupáč (2)**.

Astycoryphe gracilis (Barr.) p. 387, **Svoboda & Prantl (2)**.

Atops trilineata Emmons probably not found in N.W. Vermont p. 777, **Shaw (2)**.

Atractopyge Hawle & Corda referred to Encrinurinae p. 253, **Hupé (4)**.

Atractopyge ind. sp. for *Cybele verrucosa* & *C. rugosa* [partim] of Elles 1922 (p. 145) p. 423 pl. xl figs. 106, 109-110, **Whittington (2)**.

Aulacopleura (*A.*) *konincki haueri* (Frech) p. 208, *A. (Paraulacopleura)* [sic] *inexpectata* (Barr.) p. 225, **Svoboda & Prantl (1)**.

Aulacopleura (*Aulacopleura*) *konincki konincki* (Barr.) p. 379, A. (A.) sp. p. 376, A. (A.) *nitida* (B.) p. 381, Horný.

Aulacopleura (*Aulacopleura*) *nitida* (Barr.) p. 582, Bouček & Příbyl.

Austinvillia Resser 1938 discussed and referred to Antagminae pp. 6, 22, A. *virginica* R. from Quebec p. 23 pl. i fig. 5 (drawing), pl. iv figs. 8–10, A. sp. [close to A. v.] from Vermont; A. *bicensis* R. type of *Bicella* gen. n. p. 26, Rasetti.

Austinvillia billingsi sp. n. for A. n. sp. Shaw 1954 Cambrian (Lower) U.S.A. (Vermont) p. 777 pl. lxxiii figs. 1–4, Shaw J. Paleont. 29 5 1955.

Bailiella levyi Mun.-Ch. et Berg. p. 113, Astre.

Bailiella ulrichi Resser & Endo p. 23, B. sp. p. 42, Endo (1).

Bailiella ulrichi Resser & Endo p. 110, Endo (2).

Bailiella ulrichi Resser & Endo type of *Tangshihella* gen. n. p. 111, Hupé (4).

Baillielinae see *Tangshihella* gen. n.

Baltagnostus Lochman 1944 referred to Peronopsinae, B. cf. B. *centerensis* (Resser) pl. lxxvi figs. 13–14; B. *centerensis* (R.) and B. *maryvillensis* (R.) may be conspecific, B. *beltensis* L. holotype pygidium belongs to *Kormagnostus* [quod vide] p. 718, Palmer (1).

Basidechenella see *Dechenella*.

Basiliella wusungensis sp. n. p. 94 pl. ix figs. 10–12, pl. x figs. 1–7, B. *chinkoutzuensis* [chinkoutzuensis on pl. expl.] sp. n. p. 94 pl. x figs. 8–9 Ordovician (Lower) Manchuria, Endo Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Bathynotus Hall 1860 discussed p. 96, B. *namanensis* Lermontova refigured p. 97 pl. xvi figs. 5, 5a–d, Lermontova (1).

Bathynotus holopygus (Hall) 1859 p. 778, B. h ? pl. lxxiii fig. 5, Shaw (2).

Bathyurellus glensaulensis Reed affinities with *Hyperbolochilus* discussed p. 423, Kobayashi (1).

Bathyurellus sp. p. 293, Cloud & Barnes.

Bathyuridae—see *Gonioteloides* gen. n., *Licnocephala*, *Lachnostoma*.

Bathyurids (several undescribed types) p. 21, Poulsen & Rasmussen.

Bathyuriscellus gen. n. [Corynexochidae] p. 102 for type B. *robustus* sp. n. p. 103 pl. xiv figs. 2, 2a, ? B. *robustus* p. 104 pl. xiv figs. 3, 4 Cambrian (Lower) U.S.S.R. (Yakutsk), B. *grandis* sp. nov. [nom. nud.] p. 157, Lermontova Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Bathyuriscidella palauquiana sp. n. p. 4 [unillustr.] Cambrian (Middle) Argentina (Mendoza), Rusconi Bol. paleont. B. Aires No. 32 1955.

Bathyuriscidella palauquiana Rusc. illustrated p. 23 pl. i fig. 16, Rusconi (5).

Bathyuriscus asiaticus Lorenz a synonym of *Amphoton deois* (Walcott) p. 60, Endo (1).

Battus nudus Beyrich 1845 type of *Phalagnostus* gen. n. since it is debatable whether it can be considered type of *Phalacroma* Hawle & Corda, P. *scutiforme* H. & C. a synonym p. 925, Howell (2).

Bavarilla Barrande 1868 discussed and referred to Calymenidae p. 34, B. *hofensis* (B. 1868) neotype with synonyms *Conocephalites ? münsteri*, C. *quaesitus* & *Calymene tristani* var. *bavarica* B. 1868 spp. p. 35 pl. vi figs. 44–61 text-fig. 34 (reconstruction), Prantl & Růžicka's 1941 record of B. h. may be different p. 36, Szdzy.

Bellefontia Ulrich 1924 referred to Ogygiocarinae and discussed p. 436, B. *platana* sp. n. p. 436 pl. iii figs. 2–5, B. ? aff. *collicana* (Raymond) p. 437 pl. v figs. 4–5, B. ? sp. p. 437 pl. v fig. 6 Ordovician (Lower) Canada (B.C.), *Symphysurina walcotti* Kindle 1929 may belong to B. p. 373, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Bellefontia recorded p. 2055, Flower.

Bellefontia n. sp. a [undescribed] p. 12, Hintze (1).

Bellefontia-like n. gen. [undeser.] n. sp. a [undeser.] p. 12, Hintze (1).

Beltella depressa listed p. 5, Curtis.

Bergamia gen. n. [Trinucleidae] p. 31 for type *B. rhodesi* sp. n. Ordovician (Lower) Britain (Shropshire) p. 32 pl. iii figs. 8-13, *B. gibbsi* (Salter) p. 34 pl. iv figs. 1-2, *B. ? sedgwicki* (S.) syntype figured p. 34 pl. iv figs. 3-4, *B. ? etheridgei* (Hicks) lectotype chosen & figured p. 34 pl. iv figs. 5-6 [sp. may be better considered nom. dubium p. 35]. "*Trinucleus*" *hibernicus* Reed also referred tentatively to *B.* p. 35, Whittard Palaeontogr. Soc. [Monogr.] 109 1955.

Bergeroniaspis gen. n. [Protolenidae] for type *B. kutorginorum* sp. n. p. 79 pl. xii figs. 1, 1a, *B. ornatus* sp. n. p. 81 pl. xii figs. 2, 2a, *B. divergens* Lermontova for *Bergeroniellus* d. L. 1940 refigured p. 83 pl. xii fig. 3 Cambrian (Lower) U.S.S.R. (Yakutsk), Lermontova Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Bergeroniellus Lermontova 1940 referred to Protolenidae, *B. asiaticus* L. restr. refigured p. 63 pl. ix figs. 1, 1a-d, ? 2, pl. x figs. 1, 1a-d, pl. xi figs. 1, 1a, ? 1b, *B. sp.* 1 (? *B. asiaticus*) for *B. a.* of L. 1940 *partim* (pl. 38 fig. 1e) p. 68 pl. ix fig. 3, *B. asiaticus* var. *expansus* var. n. p. 69 pl. xi fig. 3, *B. sp.* 2 p. 70 pl. xi fig. 3a, *B. spinosus* sp. n. p. 71 pl. x figs. 2, 2a-b, *B. brevoculus* sp. n. p. 73 pl. xi fig. 2, *B. atlassovi* sp. n. for *B. asiaticus* of L. 1940 *partim* (pl. 38 fig. 1j) p. 74 pl. xi figs. 4, 4a, *B. sp.* 3 (? *B. atlassovi*) for L. 1940 pl. 39 fig. 1b p. 75 pl. xi figs. 6-7, *B. flerovae* sp. n. p. 76 pl. xi fig. 5, *B. sp.* 4 (*B. flerovae* ?) p. 77 pl. ix fig. 4, *B. ? clavatus* sp. n. p. 78 pl. vii fig. 2, *B. sp.* indet. pl. xi fig. 8 Cambrian (Lower) U.S.S.R. (Yakutsk), *B. glabratus* sp. nov. [nom. nud.] p. 156; *B. divergens* L. 1940 referred to *Bergeroniaspis* gen. n. [quod vide] p. 83, Lermontova Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Bergeroniellus sp. table 1, Zelenov, Zhuravleva & Korde.

Bicella gen. n. [Ptychopariidae (Antagminae)] for type *Austinivillia bicensis* Resser 1938 p. 26 pl. i fig. 7 (drawing), pl. iv figs. 1-7 Cambrian (Lower) Canada (Quebec) [in boulders], Rasetti Smithson. misc. Coll. 128 7 1955.

Billingsaspis Resser 1935 should be discarded as the type species is unidentifiable p. 5, Rasetti.

Billingsaspis Resser 1935 discussed p. 778, *B. adamsii* (Billings) 1861 for *Conocephalites a. B.* with synonyms *C. vulcanus* B. 1861 [original type of *B.*] and *Ptychoparella billingsi* & *vermontensis* Resser 1937 spp. p. 779 pl. lxxiii figs. 6-12, *B. walcotti* (R.) 1937 for *P. w. R.* with synonym *P. swantonensis* R. 1937 p. 781, Shaw (2).

Binodaspis gen. n. [Incertae sedis] p. 138 for type *B. spinosa* sp. n. p. 142 pl. xix figs. 5, 5a-b, *B. sp.* I p. 138 pl. xix figs. 2, 2a-b, *B. sp.* II p. 140 pl. xix fig. 3, *B. ? sp.* p. 141 pl. xix figs. 4, 4a Cambrian (Lower) U.S.S.R. (Yakutsk), Lermontova Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Blackwelderia longispina Resser & Endo. *B. ? cornuta* E., *B. ? granosa* E., *B. paronai* (Airaghi) p. 10, *B. spectabilis* R. & E. p. 26, Endo (1).

Blackwelderia longispina Resser & Endo, *B. ? cornuta* E., *B. granosa* E. p. 109, *B. spectabilis* R. & E. p. 110, Endo (2).

Blackwelderia sinensis (Bergeron), *B. paronai* (Airaghi) p. 425 ff., *B. sp.* p. 426, *B. cf. p.* p. 428; *B. ? cornuta* Endo 1937 *partim* may belong to *Diceratocephalus* gen. n. p. 433, Lu.

Blackwelderia ex. sinensis (Bergeron) and *B. paronai* (Airaghi)—*Teinistion sodeni* Monke 1903 referred p. 93, *B. monkei* (Walcott) for *Stephanocare* ? sp. M. 1903 p. 90, Kobayashi (2).

Blackwelderioides gen. n. [nom. nud. 1953] [Damesellinae] for type *Stephanocare* ? *monkei* Walcott p. 146 text-fig. 144 (3) drawing Cambrian China (Shan-tung), Hupé Ann. Paléont. 41 1955.

Blandicephalus gen. n. [Ptychopariidae] p. 748 for type *B. texanus* sp. n. Cambrian (Upper) U.S.A. (Texas) p. 749 pl. lxxxv figs. 7-10, **Palmer J. Paleont.** 28 6 1955.

?*Blountia barranqueana* Rusc. illustrated p. 21 pl. i fig. 5, *B. cuyana* R. p. 36 pl. iii fig. 3, ?*B. pampeana* R. p. 37 pl. iii fig. 4, **Rusconi (5).**

Blountia cuyana sp. n. p. 3 [unillustr.] Cambrian (Upper) Argentina (Mendoza), **Rusconi** Bol. paleont. B. Aires No. 31 1955.

Blountia nixonensis Lochman including in synonymy *Maryvillia hybrida* Resser partim [cranidium] p. 722 pl. lxxix fig. 4, *B.* sp. pl. lxxix fig. 12, **Palmer (1).**

?*Blountia pampeana* sp. n. p. 2 [unillustr.] Cambrian (Upper), ?*B. barranqueana* sp. n. p. 3 Cambrian (Middle) Argentina (Mendoza), **Rusconi** Bol. paleont. B. Aires No. 32 1955.

Blountina Lochman 1944 a synonym of *Protillaenus* Raymond 1937 p. 723, **Palmer (1).**

Boeckaspis gen. n. (nom. n. for *Boeckia* Brögger 1882 non Malm 1870) for type *Boeckia hirsuta* B. 1882 p. 161, **Henningsmoen** Norsk geol. Tidsskr. 35 1955.

Boeckia Brögger 1882 non Malm 1870 renamed *Boeckaspis* nom. n. p. 161, **Henningsmoen.**

Bolaspidella Resser 1937 discussed with diagnosis, following considered synonyms *Deltophthalmus* R. 1938, *Hysteropleura* Raymond 1937, *Deissella* Howell & Duncan 1939 and *Howellaspis* Lochman & Denson 1944 p. 739, *B. burnetensis* (Walcott) so referred rather than to *Cedaria* p. 740 pl. lxxxiii figs. 10, 12, 13, *B. prooculis* sp. n. Cambrian (Upper) U.S.A. (Texas) p. 740 pl. lxxxiii figs. 14-15, *B. wellsvillensis* (Lochman & Denson) with synonym *H. snowyensis* Duncan p. 741 pl. lxxxiii fig. 11, *B.* sp. p. 741 pl. lxxxiii fig. 9, **Palmer J. Paleont.** 28 6 1955.

Bolaspidella wellsvillensis (Lochman & Duncan) [sic] p. 1394, **McMannis.**

Bolbocephalus aff. *B. jeffersonensis* Cullison pl. xlii fig. 24, *B.* cf. *B. j.* pl. xlii fig. 25, **Cloud & Barnes.**

Bollandia Reed 1943 either a synonym of or a subgenus of *Griffithides* Portlock 1843 p. 411, **Příbyl.**

Bonneterrina Lochman 1936 referred to *Cedariidae*, *Piedmontia* Resser 1938 a synonym p. 725, *B. appalachia* (Walcott) for *Lonchocephalus a.* W. pl. lxxx fig. 9; *B. aspinosa* Tasch generic assignment questioned p. 726, **Palmer (1).**

Bonnia Walcott 1916 discussed p. 118, *B. inflata* Lerm. refigured p. 119 pl. xvii figs. 1, 1', 1a-d', **Lermontova (1).**

Bonnia brennoides, *B. laevigata*, *B. sculpta* Rasetti spp., *B. crassa*, *B. tensa* Resser spp., *B. brennus* (Walcott), *B.* sp. undet. listed p. 3, *B. fieldensis* (W.) p. 22, **Rasetti.**

Bonnia bubaris (Walcott) 1916 p. 781 pl. lxxiii figs. 13-14, *B. capito* (W.) 1916 with synonyms *B. lata*, *B. swantonensis*, *B. vermontensis* Resser 1936 spp. and *B. tensa* R. 1938 p. 781 pl. lxxiii figs. 15-25, *B. senecta* (Billings) record of W. 1912 from Vermont discussed p. 783, **Shaw (2).**

Bonnia sp. table 1, **Zelenov, Zhuravleva & Korde.**

Bonniella desiderata (Walcott) 1891 p. 783, **Shaw (2).**

Borthaspis Stubblefield 1951 referred to Ogygiocarinae but may belong to Nileidae p. 196 n, **Hupé (4).**

Boschchekulia gen. n. [Ceratopygidae], *B. lata* sp. n. p. 25 pl. iii fig. 13, *B. multisegmentata* sp. n. p. 26 [unillustr.], *B.* sp. p. 26 pl. iii fig. 14 [cranidium—tentatively referred to *B. l.* pl. expl.] Cambrian (Upper) U.S.S.R. (Kazakhstan), **Lermontova** Upper Cambrian trilobites and brachiopods from Boshche-Kulya, 1951.

Bouleia Kozłowski 1923 referred to Phacopidae (Bouleinae) subfam. n. p. 238, **Hupé (4).**

Bouleia dagincourti Ulrich opisthoparian (cedariiform) facial suture described, type specimen refigured pl. xxx figs. 2-4, text-fig. 1, **Hupé (2).**

Bouleinae subfam. n. [Phacopidae] for *Bouleia* p. 238, **Hupé** Ann. Paléont. 41 1955.

Brachyaspidon [sic] sp. p. 1394, **McMannis**.

Brachyaspis Salter 1866 may belong to Nileidae, *B. rectifrons* (Portlock 1843) discussed and existence of sagittal suture on cephalic doublure doubted p. 145, *B. ? australis* sp. n. Ordovician (? Upper) Canada (Baffin I.) p. 143 pl. lxii figs. 21, 27, pl. lxiii figs. 6, 9, 10, 13, 14, **Whittington** Mem. geol. Soc. Amer. No. 62 1954.

Brachymetopina see *Brachymetopus*.

Brachymetopus see *Piltonia* gen. n.

Brachymetopus rusticus sp. n. p. 344 pl. liii figs. 1-6 Carboniferous (Lower) U.S.A. (Ohio), *B. lodiensis* (Meek) discussed p. 344, **Hyde** Bull. geol. Surv. Ohio No. 51 1953.

Brachymetopus (*Brachymetopina*) *woodwardi* Whidborne 1896 sens. nov. lectotype selected & figured, revised description p. 44 pl. ii figs. 14-15 text-figs. 7a, b, **Goldring**.

Brachymetopus ? sp. p. 360, **Scholten et al.**

Brassicicephalus cf. *B. pulchellus* Lochman p. 757 pl. lxxxix fig. 3, **Palmer** (1).

Briscoia recorded p. 2055, **Flower**.

Broeggerolithus bureauvi (Oehlert) so referred text-fig. 246, **Hupé** (4).

Brongniartella inexpectata (Barr.) p. 236 pl. i figs. 4-6, **Marek** (1).

Brongniartella inexpectata (Barr.) p. 8, **Marek** (2).

Bronteidae Corda 1847 a synonym of Scutelluidae nom. (1) [quod vide], **R. & E. Richter** (2).

Bronteopsis Nicholson & Etheridge 1879 discussed with diagnosis & referred to Styginidae pp. 11, 15, *B. concentrica* (Linnarsson 1869) for *Ogygia* ? c. L. lectotype selected & figured with synonym *B. scotica* N. & E. p. 16 pl. v figs. 1-3, 5, text-fig. 1, *B. holtedahli* sp. n. Ordovician (Middle) Norway (Mjøsa) including *O. concentrica* of Funquist 1919 p. 17 pl. v figs. 4, 7, *B. panderi*

(Schmidt 1904) for *Ogygiocaris* p. 8. [type of *Homoglossa* Raymond 1912] p. 19, *B. ? törnquisti* for *Holometopus t.* Moberg & Segerberg 1906 p. 19; *B. ardmillanensis* Reed and *B. gregaria* Raymond referred to *Raymondaspis* p. 23, **Skjeseth** Norsk geol. Tidsskr. 35 1955.

Bulaiaspis predtechenskii sp. nov. [nom. nud.] p. 162, **Lermontova** (1).

Bumastoides subgen. n. see *Bumastus*.

Bumastus (*Bumastoides*) subgen. n. for type *Iliaenus milleri* Billings 1859 Ordovician Canada (Ontario) holotype figured p. 138 pl. lxii figs. 16-18, 20, 25, 26, 29, *B. (B.)* sp. ind. p. 140 pl. lxii figs. 22, 24; following spp. referred to *B. (Bumastoides)*—*bellevillensis*, *billingsi* Raymond & Narraway 1908 spp., *beckeri* Slocum 1913, *porrectus*, ? *aplatus*, ? *longiops* Raymond 1925 spp., *tenuirugosus* Troedsson 1928 p. 139; *Bumastus* sp. ind. Roy 1941 referred partim to *Anataphrus borraeus* gen. et sp. n. and partim to *Brachyaspis ? australis* sp. n. p. 140, **Whittington** Mem. geol. Soc. Amer. No. 62 1954.

Bumastus billingsi Raymond & Narraway from Missouri p. 6 pl. i figs. 1-6, **Howell** (1).

Bumastus billingsi p. 765, *B.* sp. p. 763, **Weiss**.

Bumastus bouchardi (Barr.) p. 381, *B. bouchardi* (B.) n. var. [undeser.] p. 347ff., **Horný**.

Bumastus tenuirugosus Troedsson, *B.* sp. [near *B. fronto* T.], *B.* spp. A & B [undeser.] p. 154, **Wilson** in Fortier.

Bumastus trentonensis (Emmons) p. 36, **Baillie**.

Burlingida Kobayashi 1954 [not seen] as an order for *Burlingia*, *Schmalensecia*, Norwoodidae, "and a few others" p. 411, **Kobayashi** (1).

Burlingiidae? see *Fissocephalus* gen. n.

Bynumia metisensis Rasetti see Genus and species undet. 1.

Calliops brevis (Roy 1941) restr. (fig. 131a—refigured) with synonym *Eomonorachus deloi* R. (refigured) p. 131 pl. lx figs. 5, 7, 8, 11, 14, 15, *C. brevis*? for Roy fig. 131b (refigured) p. 133 pl. lx figs. 9, 10, 12, 13, 16–18, **Whittington** (1).

Calodiscus agnostoides (Kobayashi 1943) p. 15 pl. ii fig. 1, *C. cf. a.* p. 16 pl. ii figs. 2–3, *C. sp. inc.* p. 16 pl. i figs. 14–15 from Spitzbergen, **Winsnes**.

Calvinella striata Resser & Endo p. 109, **Endo** (2).

Calvinella sp. p. 429, **Lu**.

Calybole see *Cyrtosymbole*.

Calymene Brongniart 1822 emend. Shirley 1936 referred to Calymeninae p. 225, **Hupé** (4).

Calymene small moult-stages recorded p. 512, **Tasch**.

Calymene interjecta Barr. p. 154, *C. sp.* p. 151, **Chlupáč** (2).

Calymene intermedia Lindström, *C. sp.* listed p. 112, **Lawson**.

Calymene cf. intermedia Lindstrom p. 218, **Straw**.

Calymene [s. l.] *macmillani* Roy 1941 holotype refigured p. 148 pl. lxii figs. 7–9, *C. [s. l.] sp. ind.* for *C. croneisi* R. *partim* (fig. 124d refigured) p. 149 pl. lxii figs. 10–12; *C. croneisi* R. restr. referred to *Flexicalymene* but may belong to *Reacalymene* as may *C. fayettensis* Slocum 1913 p. 148, **Whittington** (1).

Calymene (Calymene) aff. reperta (Oehlert) p. 20, **Pillet** (2).

Calymene [misspelt *Olymene* at descr.] *sanmiqueli* sp. n. p. 287 text-fig. 1 Ordovician Spain (Badajoz), **Linares Rodríguez** Estud. geol. Inst. Mallada No. 12 1950.

Calymene senaria p. 690, **Clark & Strachan**.

Calymène tristani Brongniart, *C. sp.?* p. 36, **Dupuis**.

Calymene tristani var. *bavarica* Barrande 1868 a synonym of *Bavarilla hofensis* B. p. 35, **Sdzuy**.

Calymene n. sp. [undescri.] p. 315, **Chlupáč** (1).

Calymene n. sp. [undescri.] p. 371, *C. sp.* p. 342, **Horný**.

Calymenesum [recte *Calymenesun*] Kobayashi 1951 referred to Reedocalymeninae subfam. n. p. 227, **Hupé** (4).

Calymenid? [pygidium] p. 425 pl. xl fig. 120, **Whittington** (2).

Calymenidae — Pharostomatidae Hupé 1953 a synonym, family considered fundamentally opisthoparian, *Cliffia* and *Calymenidius* show similarities to Calymenidae p. 30, see *Pharostomina* gen. n. and *Bavarilla*, **Sdzuy**.

Calymenidae classified into Calymeninae and Colpocoryphinae & Reedocalymeninae subfam. n. p. 225, **Hupé** (4).

Calymeninae nov. as a subfamily of Calymenidae for *Calymene*, *Diacalymene* and *Papillicalymene* p. 225, **Hupé** (4).

Calymenopsis Bergeron 1895 considered close to or synonymous with *Euloma* [quod vide] p. 30, **Sdzuy**.

Calymenopsis filacovi M.-Chalm. & Berg. referred tentatively to Eulominae subfam. n. p. 450, **Kobayashi** (1).

Calypptaulax recorded p. 1436, **Evitt**.

Calypptaulax? goodridgii (Schuchert 1900) holotype refigured with synonym *C. sillimani* Roy 1941 (refigured) p. 134 pl. lxii figs. 1–6; *Dalmanites intermedius* of Clarke 1897 referred to *C. p.* 135, **Whittington** (1).

Camaraspis fragments p. 1515, **Wilson** (1).

Carolinites sp. A [undescri.] p. 15, **Hintze** (1).

Cedaria eurycheilos sp. n. Cambrian (Upper) U.S.A. (Texas) p. 726 pl. lxxx figs. 5–7, *C. burnetensis* (Walcott) referred to *Bolaspidea* p. 740, **Palmer J. Paleont.** 28 6 1955.

Cedariidae — pygidia assigned by Loehman 1950 to *Syspacheilus* belong here p. 734, **Palmer** (1).

Cedarina cordillerae (Howell & Duncan) p. 727 pl. lxxx figs. 8, 10, **Palmer** (1).

Celmus granulatus Ang. p. 115, *C. aff. g.* p. 127, **Bohlin**.

Ceratocephala (*Acidaspis*) *tuberculata* Conrad—the supposed graptolite *Monograptus beecheri* Girty 1895 represents the cephalic margin of this or related form pl. xii, Ruedemann.

Ceratocephala verneuili (Barr.) p. 353, Horný.

Ceratocephala verneuili (Barr.) p. 384, *C. cf. vesiculosa* (Beyr.) p. 385, Svoboda & Prantl (2).

Ceratocephala verneuilli (Barr.) p. 582, Bouček & Fribyl.

Ceratocephala vesiculosa (Beyr.) p. 154, Chlupáč (2).

Ceratocephala vesiculosa (Barr.) [sic] p. 219, Svoboda & Prantl (1).

Ceratocephala vesiculosa (Barr.) [sic] p. 534, Svoboda & Prantl (4).

Ceratocephala? sp. p. 20, Pillet (2).

Ceratonurus krejčí (Nov.) p. 154, Chlupáč (2).

Ceratopeltis Poulsen 1937 referred tentatively to Proceratopyginae subfam. n. p. 67, Kobayashi & Ichikawa.

Ceratopyge canadensis Walcott 1912 type of *Housiella* gen. n. [Kobayashi] p. 66, Kobayashi & Ichikawa.

Ceratopygidae see *Boschchekulia* gen. n.

Ceratopygidae Raymond discussed and classified into Proceratopyginae subfam. n. [Kobayashi], Housiinae and Ceratopyginae p. 67, Kobayashi & Ichikawa.

Ceratopygidae Raymond 1913 discussed, Asaphidae (but not Asaphiscidae) considered related p. 20, Sdzuy.

Ceratopyginae emend. taken to include *Ceratopyge*, *Hysterolenus*, *Diceratopyge* and *Dichelepyge* p. 67, KOBAYASHI in Kobayashi & Ichikawa.

Ceraurina? ind. sp. for *Cybele rugosa* [partim] of Elles 1922 (p. 145) p. 422 pl. xl figs. 102, 107, 111, Whittington (2).

Ceraurinus icarus (Billings) p. 26 ff., Baillie.

Ceraurinus marginatus Barton 1913 [type of *C.*] may be congeneric with *Remipyga glabra* gen. et sp. n. [quod vide] p. 128, *C. daedalus* Cox 1933 discussed & referred to *R.* p. 130, *C. icarus noduliferous* [sic] Roy 1941 may be conspecific with *R. glabra* p. 130, Whittington (1).

Cerauroides hawlei (Barr.) p. 355, Horný.

Ceraurus intermedius sp. n. Ordovician (Upper) Poland (Lysa Gora) including in synonymy *Cheirurus insignis* of Olin 1906 and ? Ravn 1899 p. 216 (65) pl. i figs. 1—8, pl. ii figs. 1—6 text-figs. 1 (reconstruction), 2 (meraspid cranidia), Kielan Acta geol. polon. 5 2 [Palaeont.] 1955.

Ceraurus pleurexanthemus (Green) p. 36, Baillie.

Ceraurus pleurexanthemus p. 690, Clark & Strachan.

Ceraurus sp. p. 129, Bohlin.

Ceraurus sp. p. 11, JAANUSSON in Jaanusson & Mutvei.

Ceraurus sp. p. 154, WILSON in Fortier.

Ceraurus [s. l.] sp. ind. p. 131 pl. lx fig. 6; *C. horridus* Troedsson 1928 partim (pl. 17 figs. 1—3—cephalon) referred to *Hapsiceraurus* gen. n. [quod vide] p. 127, Whittington (1).

Ceraurus (undescribed) p. 21, Poulsen & Rasmussen.

Ceraurus recorded p. 1436, Evitt.

Ceraurus? or *Neolenus?* p. 19, Sampelayo.

Changshania conica Sun p. 25, Endo (1).

Chariocephalus sp. recorded p. 2055, Flower.

Chasmops conicophthalma p. 34, SPJELDNAES in Hagemann & Spjeldnaes.

Chasmops macrourus Sjögren, *C. n.* sp. [undeser.] p. 237, Martna.

Chaunoproetus palensis p. 229, *C.* sp. p. 247, Rabien.

Cheilocephalus Berkey 1898 discussed with description p. 757, *Pseudolisania* Kobayashi 1935 a subjective synonym p. 758, *C. breviloba* (Walcott) with synonyms *P. raaschi* & *P. texana* Lochman p. 759 pl. lxxxviii figs. 1-4, *C. minutus* sp. n. Cambrian (Upper) U.S.A. (Texas) p. 759 pl. lxxxviii figs. 5, 6, 8, Palmer J. Paleont. 28 6 1955.

Cheilocephalus n. sp. [undescri.] p. 1515, Wilson (1).

Cheirurid hypostome p. 131, Whittington (1).

Cheiruridae see Crotalurinae subfam. n.

Cheirurinae see *Hapsiceraurus* and *Remipyga* gen. n.

Cheiruroides orientalis Resser & Endo p. 111, Endo (2).

Cheirurus bicuspidatus Bouč. p. 347, C. cf. b. p. 365, *C. quenstedti* Barr. p. 347, *C. insignis* B. p. 377, *C. sp.* (ex gr. *C. insignis*) p. 382, *C. obtusatus* B. p. 379, *C. sp. ind.* p. 323, *C. (Crotalocephalus)* [sic] sp. p. 334, Horný.

Cheirurus (Cheirurus) bicuspidatus Bouček p. 526, *C. (Crotalocephalus) gibbus* Beyr. mut. nov. [undescri.] p. 531, Svoboda & Prantl (4).

Cheirurus discretus Barrande 1868 with possible synonym *C. gracilis* B. referred to *Pilekia* p. 44, Szűcs.

Cheirurus (Crotalocephalus) gibbus Beyrich listed from Sahara p. 23, Le Maître (2).

Cheirurus (Crotalocephalus) gibbus Beyr., *C. (C.) globifrons* (Hawle & Corda), *C. (C.) sternbergi*, *C. (C.) cf. pauper* Barr. spp. p. 154, *C. (C.) gibbus* Beyr. nov. mut. [undescri.] p. 151, Chlupáč (2).

Cheirurus (Crotalocephalus) gibbus Beyr. p. 387, *C. (C.) globiceps* Hawle & Corda p. 388, Svoboda & Prantl (2).

Cheirurus (Crotalocephalus) gibbus (Beyr.), *C. (Crotalocephalus) cf. sternbergi* B. p. 438, Svoboda & Prantl (3).

Cheirurus (Crotalocephalus) [sic] *gibbus* (Beyr.) nov. mut. [undescri.] pp. 314, 326, Chlupáč (1).

Cheirurus insignis of Olin 1906 and ? Ravn 1899 referred to synonymy of *Ceraurus intermedius* sp. n. p. 216 (65), Kielan.

Cheirurus (C.) quenstedti Barr. p. 208, *C. (Crotalocephalus) gibbus* (Beyr.) mut. [undescri.] p. 213, Svoboda & Prantl (1).

Cheirurus (Crotalocephalus) aff. sternbergi (Boeck) recorded with synonymy p. 6, Pillet (1).

Cheirurus (Crotalocephalus) aff. sternbergi (Boeck) p. 21, Pillet (2).

Cheirurus (Cheirurus) transiens Bouč. p. 582, Bouček & Přibyl.

"*Cheirurus*" sp. p. 128 pl. iii fig. 1, Bohlin.

Chuangia batia (Walcott) p. 109, Endo (2).

Chuangia puteata Resser & Endo a synonym of *C. batia* (Walcott); *C. planicaudata* sp. n. p. 70 pl. ix fig. 13, pl. x figs. 10-11, *C. conica* sp. n. p. 71 pl. viii figs. 2, 4-6 Cambrian (Upper) Manchuria, *C. batia* (W.) var. [undescri.] p. 10, *C. transversalis* Kobayashi, *C. kawadai* K., *C. nitida* W. p. 9, Endo Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Chuangis [recte *Chuangia*] *batia* Walcott p. 65, Kobayashi & Ichikawa.

Clelandia? sp. p. 456 pl. vi figs. 5a-b, Kobayashi (1).

Cnemidopyge gen. n. [Raphiophoridae] p. 21 for type *Ampyx nudus* (Murchison) and including *A. bisectus* Elles & provisionally *A. costatus* Boeck, *C. granulata* sp. n. Ordovician (Middle) Britain (Shropshire) p. 22 pl. ii figs. 9-12, Whittard Palaeontogr. Soc. [Monogr.] 109 1955.

Cobboldia dentata Lermontova refigured p. 23 pl. iii figs. 2, 2a-e, Lermontova (1).

Cobboldia dentata Lerm. table 1, Zelenov, Zhuravleva & Korde.

Coignouina see *Otarion*.

Coleopachys Raymond 1937 referred tentatively to *Solenopariidae* p. 116, Huré (4).

Colpocoryphe Novák 1918 referred to *Calymenidae* (*Colpocoryphinae*) subfam. n. p. 225, Huré (4).

Colpocoryphinae subfam. n. (Calymenidae] p. 225 for *Colpocoryphe*, *Synhomalonotus*, *Flexicalymene*, *Reacalymene*, *Gravicalymene*, *Metacalymene* and *Platycalymene*, Hupé Ann. Paléont. 41 1955.

Columbicephalus gen. n. [Ogygiocarinae] for type *C. macrops* sp. n. p. 444 pl. v figs. 7a-b Ordovician (Lower) Canada (B.C.), Kobayashi J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Comura see *Asteropyge*.

Conocephalites adamsii Billings 1861 see *Billingsaspis*, *C. vulcanus* B. 1861 considered (following Matthew 1897) the junior synonym of *C. adamsii* p. 778 [see also *Ptychoparia* a. & P. v.], *C. teucer* B. 1861 see *Ptychoparella*, Shaw (2).

Conocephalites innotatus Barrande 1868 with synonyms *C. extremus*, *C. discrepans*, ? *C. ? problematicus* B. spp. referred to *Niobe* (*Niobella*) p. 22; *C. (Bavarilla) hofensis* B. 1868 with synonyms *C. ? münsteri* & *C. quaesitus* B. spp. to *Bavarilla* p. 35; *C. bavaricus* B. 1868 type of *Pteroccephalina* (*Leimitzia*) subgen. n. p. 37, Szűzy.

Conocoryphe aequalis Linrs. var. *orientalis* var. n. p. 21 pl. i figs. 15-17 Cambrian (Middle) U.S.S.R. (Turkistan), Lermontova Middle Cambrian trilobites and gastropods from Shody-Mira, 1951.

Conocoryphe sulzeri sulzeri (Schloth.) p. 184 ff., Havlíček & Šnajdr.

Conocoryphidae see Meneviellinae subfam. n.

Coosella Lochman 1936 type of Coosellidae fam. n., *C. beltensis* L. with synonym *C. occidentalis* L. p. 728 pl. lxxviii figs. 4-5, *C. cf. C. granulosa* Rasetti p. 730 pl. lxxviii figs. 2-3, *C. cf. C. widnerensis* (Resser) [for *Marywillia w. R.*] p. 730 pl. lxxviii fig. 1, *C. sp.* p. 730 pl. lxxix fig. 1; *Marywillia hybrida* Resser is an unidentifiable sp. of *C.* p. 722, *C. texana* R. a synonym of *Coosia connata* (Walcott) [quod vide] p. 731, Palmer (1).

Coosellidae fam. n. for *Coosella* Lochman 1936, *Coosia* Walcott 1911, *Crepicephalus* Owen 1852, *Syspacheilus* Resser 1938 p. 727 text-fig. 4, Palmer J. Paleont. 28 6 1955.

Coosellidae Palmer 1954 [recte 1955]—if *Crepicephalus* is included the family should be called *Crepicephalidae* Kobayashi 1935 p. 37, Szűzy.

Coosia Walcott 1911 discussed and referred to Coosellidae fam. n. p. 730, *C. cf. C. albertensis* Resser p. 731 pl. lxxvii figs. 7, 9, 10, *C. connata* (Walcott) with synonyms *C. magna* Lochman and *Coosella texana* Resser p. 731 pl. lxxviii figs. 6-7; *C. connata* Lochman & Duncan 1944 (non W.) may be undetermined sp. of *Coosella*, Palmer (1).

Coosia Walcott 1911 similar to members of Paracoosiinae p. 37, Szűzy.

Coosia Walcott 1911—*Metanomocare* Lermontova 1940 a synonym p. 169, Hupé (4).

Coosia alfaensis sp. n. p. 2 [unilustr.] Cambrian (Upper) Argentina (Mendoza), Rusconi Bol. paleont. B. Aires No. 30 1954.

Coosia alfaensis Rusc. illustrated p. 31 pl. ii fig. 10, Rusconi (5).

Coosia deprati Mansuy type of *Manchurocephalus* gen. n. [quod vide] pp. 95-96, Endo (1).

Cordania see *Piltonia* gen. n.

Cornuproetus see *Proetus*.

Cornuproetus lepidus (Barr.) p. 314, Chlupáč (1).

Cornuproetus lepidus Barr. p. 385, Svoboda & Prantl (2).

Cornuproetus lepidus (Barr.) p. 529, Svoboda & Prantl (4).

Cornuproetus (*C.*) cf. *subfrontalis* (Whidborne) [after record of J. Péneau] p. 17, Pillet (2).

Cornuproetus vetustus (Barr.) p. 355, Horný.

Coronura aspectans (Hall) recorded from Sahara p. 254, Le Maître (1).

Coronura aspectans (Conrad) Hall from Sahara p. 151 pl. xx fig. 30; *Psychopyge elegans* G. & H. Termier [type of *P.*] may be a pygidial fragment of *C.* p. 151n, **Le Maître** (2).

Corrugatagnostus Kobayashi 1939 discussed and considered a full genus p. 6, *C. morea* (Salter) of which *Aagnostus perrugatus* Barrande (holotype refigured text-figs. 2b, c) a synonym p. 10 pl. i figs. 9–11, *C. sol* sp. n. for *A. perrugatus* of Reed 1903 Ordovician (Upper) Britain (Scotland) syntypes figured p. 12 pl. i figs. 12–13, **Whittard** Palaeontogr. Soc. [Monogr.] **109** 1955.

Corydocephalus heteroclyta (Barr.) p. 526, **Svoboda & Prantl** (4).

Corynexochidae Angelin 1852 discussed p. 98, **Lermontova** (1).

Corynexochidae see *Judaicella*, *Bathyriscellus*, *Jakutus* gen. n.

Corynexochina Lermontova 1940 discussed, *C. weberi* L. p. 23 pl. ii figs. 5–9, *C. inflata* sp. nov. [nom. nud.] p. 26 Cambrian (Middle) U.S.S.R. (Kazakhstan), **Lermontova** (2).

Craigheadia Hupé 1953 [recte **gen. n.**] [Scutellidae or Styginidae] p. 206 for type *Eobronteus grayi* (Reed 1904) Ordovician (Upper) Britain (Scotland), **Hupé** Ann. Paléont. **41** 1955.

Crassifimbria species undetermined No. 1 p. 19 pl. iii fig. 23, *C.* sp. undet. No. 2 p. 20 pl. ii figs. 9–10 Cambrian (Lower) Canada (Quebec) [in boulders], **Rasetti**.

Crepicephalidae see Coosellidae.

Crepicephalidae Kobayashi 1935 considered an unnatural association, genera referred to Coosellidae and Tricrepicephalidae **famm. n.** [quae vide] pp. 727, 752, **Palmer** (1).

Crepicephalina mukdensis Resser & Endo p. 110, **Endo** (2).

Crepicephalina pergranosa Resser & Endo p. 15, *C. convexa* (Walcott), *C. mukdensis* R. & E. p. 21, *C. bispinosa* E. p. 29, *C. quadrata* R. & E. p. 22, **Endo** (1).

Crepicephalinae — *Meteoraspis* referred p. 139, **Hupé** (4).

Crepicephalus Owen 1852 referred to Coosellidae **fam. n.**, *C. australis* sp. n. p. 732 pl. lxxvii figs. 5, 8, *C.* cf. *C. iowensis* (Owen) p. 732 pl. lxxvii figs. 3, 6, *C. ? perplexus* sp. n. p. 733 pl. lxxvii figs. 1, 2, 4 Cambrian (Upper) U.S.A. (Texas), **Palmer J.** Paleont. **23** 6 1955.

Crepicephalus ceratopygoides Raymond 1925 referred tentatively to *Leioptegium* (*Evansaspis*) **subgen. n.** p. 421, *C.* sp. indet. R. 1925 discussed p. 453, **Kobayashi** (1).

Crepicephalus orientalis Endo p. 9, **Endo** (1).

Crepicephalus orientalis Endo p. 109, **Endo** (2).

Cromus see *Encrinurus*.

Crossura Moberg & Segerberg 1906 may be young form of *Euloma* p. 40, **Sdzuy**.

Crotallocephalus see *Cheirurus*.

Crotallocephalus see *Cheirurus*.

Crotalurinae **subfam. n.** [? Cheiruridae] p. 248 for *Crotalurus*, **Hupé** Ann. Paléont. **41** 1955.

Crotalurus Volborth 1858 referred to Cheiruridae (*Crotalurinae*) **subfam. n.** p. 248, **Hupé** (4).

Cruzoia Walcott 1924 referred tentatively to Menomonniidae p. 163, **Hupé** (4).

Cryphops see *Phacops*.

Cryptolithid (undescribed) from Middle Ordovician of Oslo which may be the same as Thorslund's 1948 record of *Reedolithus carinatus* [quod vide] p. 46 n, **SPJELDNAES** in **Hagemann & Spjeldnaes**.

Cryptolithus goldfussi (Barr.) not a synonym of *C. ornatus* (Sternb.) p. 5 n, listed p. 4 ff., **Röhlich & Chlupáč**.

Cryptolithus ornatus (Stbg.) p. 212 ff., **Havlicek & Šnajdr**.

Cryptolithus stelarusconii Rusc., *C.* sp. pp. 10, 51, **Rusconi** (5).

Cryptolithus tessellatus p. 690, **Clark & Strachan**.

Ctenopyge affinis Westergård p. 529, **Lindström**.

Cummingella Reed 1942 placed on Official List of Generic Names, type species (designated under Plenary Powers) *Phillipsia jonesii* Portlock [quod vide] p. 27, **Opinion 352**.

Cummingella Reed 1942 emend. Stubblefield 1952 referred to *Phillipsiinae* p. 410, **Frýbyl**.

Curiaspis gen. n. [Proparia incertae familiae] p. 41 for type *C. notabilis* sp. n. p. 42 pl. vii figs. 11–15 text-fig. 47 Ordovician (Tremadoc) Germany (Hof), **Sdzuy** Abh. senckenb. naturf. Ges. No. 492 1955.

Cybele loveni var. *girvanensis* Reed type of *Paracybeloides* gen. n. p. 251, **Hupé** (4).

Cybele verrucosa & *C. rugosa* [partim] of Elles 1922 (p. 145) referred to *Atractopyge* ind. sp. p. 423, *C. rugosa* [partim] to *Ceraurina* ? ind. sp. p. 422, **Whittington** (2).

Cybelidae Holliday 1942 emend. considered a subfamily of Emericinuridae to include *Cybelella*, *Cybeloides*, *Paracybeloides* gen. n., *Cybelopsis*, *Cybele* and *Ectenonotus* p. 251, **Hupé** (4).

Cybeloides aff. *C. primus* (Raymond) p. 363, **Cloud & Barnes**.

Cyclognathina gen. n. [Olenidae (Triarthrinae)], *C. microps* sp. n. p. 20 pl. v figs. 6–9, pl. i fig. 1 pars d Cambrian (Upper) U.S.S.R. (Kazakhstan), **Lermontova** Upper Cambrian trilobites and brachiopods from Boshche-Kulya, 1951.

Cyclopyge rediviva (Barr.) p. 4 ff., *C.* sp. p. 9, **Röhlich & Chlupáč**.

Cyclopyge speciosa (Corda) p. 210, *C. rediviva* (Barr.) p. 213, **Havlíček & Šnajdr**.

Cyphaspides barrandei holynensis Růžicka p. 224, **Svoboda & Prantl** (1).

Cyphaspis sp. p. 1988, **Fisher**.

Cyphaspis sp. p. 2, **Růžicka & Bouška**.

Cyphinioides Reed 1942 referred to *Phillipsiinae* p. 410, **Frýbyl**.

Cyphoniscus Salter 1853 referred to *Isocolidae* p. 129, **Hupé** (4).

Cyphoproetus regulosus [sic] Bouček p. 528, **Svoboda & Prantl** (4).

Cyphoproetus rugosus Bouč. p. 315, **Chlupáč** (1).

Cyrtodechenella meles p. 125, *C. cyrto* p. 133, **Krömmelbein et al.**

Cyrtometopus clavifrons (Dalman) pl. iii fig. 3, *C. aff. c.* p. 128, *C. sp.* pl. iii fig. 4, ? *C. sp.* p. 115, **Bohlin**.

Cyrtosymbole (*Cyrtosymbole*) *bergica* ? p. 247, **Rabien**.

Cyrtosymbole (*Calybole*) *gracilis* sp. n. p. 54 pl. ii figs. 10–13 Devonian (Upper) Germany (Thüringia), *C. (Calybole) denckmanni* R. & E. Richter pl. ii fig. 15, **R. & E. Richter** Senck. leth. 36 1–2 1955.

Cyrtosymbole hicksi (Whidborne 1896) for *Phillipsia h.* W. 1896 restr. (pl. 2 fig. 5), *C. (Macrobale) hercules* R. & E. Richter 1951 pl. i fig. 3, *C. (M.) duodecimae* R. & E. R. 1951 [complete specimen found] including with query *P. hicksi* W. partim (pl. 2 fig. 8) p. 32 pl. i fig. 2 text-figs. 5a, b, *C. (M.) mulesi* sp. n. p. 34 pl. i fig. 1 text-figs. 2a–c, *C. (Waribale) porteri* sp. n. p. 35 pl. i figs. 4–7 text-figs. 1a–c, 4a–b Carboniferous (Lower) England (Devon), **Goldring** Senck. leth. 36 1–2 1955.

Cyrtosymbole? *superstes* (Barr.) p. 541, **Svoboda & Prantl** (4).

Dactylocephalus Hsü 1936 [sic] referred to *Dikelocephalininae* p. 37, **Sdzuy**.

Dactylocephalus Hsü 1948 [erroneously ascribed to Kobayashi 1951] referred to *Dikelocephalininae* p. 173, **Hupé** (4).

Dalmaniopsis Geinitz 1862 which was erected provisionally for *Dalmanites* ? *kablikae* G. (of which the original is destroyed) considered to be not a trilobite p. 294, **R. & E. Richter** (3).

Dalmanites intermedius Walcott 1877 [type of *Eomonorachus* Delo quod vide] originals not known, *D. intermedius* of Clarke 1897 referred to *Calyptaulax* p. 135, **Whittington** (1).

Dalmanites ? *kablikae* Geinitz see *Dalmaniopsis*.

Dalmanites cf. *nevilis* Salter p. 303 pl. i fig. 25, **Le Maître** (3).

Dalmanites orba Barr. p. 319, **Horný**.

Dalmanites vulgaris (Salter) p. 89 ff., **Lawson**.

Dalmanites vulgaris (= *caudatus* Brunn) Salter p. 218, **Straw**.

Dalmanites weaveri p. 5, *D. vulgaris* p. 6, **Curtis**.

Dalmanites sp. listed p. 23, **Le Maître** (2).

Dalmanitina proeva proeva (Emmrich 1839) and *D. proeva socialis* (Barrande 1852) [type of *D.*] discussed and so referred, *D. p. grandis* (B. 1852) so referred p. 128, **Prantl** (2).

Dalmanitina socialis (Barr.) p. 220, **Havlíček & Šnajdr**.

Dalmanitina socialis grandis (Barr.) p. 236 pl. i fig. 1, **Marek** (1).

Dalmanitina socialis grandis (Barr.) p. 8, **Marek** (2).

Dalmanitina socialis proaeva (Barr.) p. 3, **Röhlich & Chlupáč**.

Dalmanitina sp. p. 1988, **Fisher**.

Dalmanitinae — Upper Devonian forms p. 63 text-fig. 2, see also *Phacopidella* and *Asteropyge*, **R. & E. Richter** (1).

Damesella paronai (Airaghi), *D. damesi* Resser & Endo, *D. conica* R. & E. p. 110, **Endo** (2).

Damesella paronai (Airaghi) hypostome p. 93 pl. xiv fig. 8, **Kobayashi** (2).

Damesella walcotti Resser & Endo 1937 a synonym of *D. paronai* (Airaghi); *D. convexa* sp. n. p. 67 pl. iii fig. 5 Cambrian (Middle) Manchuria, *D. quadrata* E. p. 19, *D. conica* R. & E. p. 20, *D. bella* R. & E. p. 33, *D. sp.* p. 44, *D. insolita* E. p. 32, *D. damesi* R. & E. p. 32, **Endo** Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Damesellidae — ontogeny discussed p. 90 ff. pl. xiv figs. 14a-b, 15a-b, figs. a-g, **Kobayashi** (2).

Damesellinae see *Blackwelderioides* gen. n.

Dartonaspis cf. *D. knighti* listed p. 460, **Okulitch & Bell**.

Dawsonida ord. n. (nom. n. for *Eodiscidi* Kobayashi 1939 since *Dawsonia* Hartt 1868 has priority over *Eodiscus* Matthew 1896) p. 14, classified into Dawsonidae and Page-tidae, **Lermontova** Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Dawsonidae Resser name preferred to Eodiscidae Raymond, family referred to Dawsonida p. 14, **Lermontova** (1).

Dechenella praeverneuili R. & E. Richter [nom. nud.] pp. 236, 240 Devonian (Middle) Germany (Rhine-land), **Glinski**.

Dechenella (*Dechenella*) *verneuili* (Barr.) p. 104 ff., *D. (D.) burmeisteri* s. l. p. 139 ff., *D. struvei* p. 151 ff., *D. (Basidechenella) kayseri* p. 22 ff., **Krömmelbein et al.**

Dechenella verneuili p. 284, **Struve**.

Dechenellinae — *Drevermannia* Richter excluded p. 504, **Příbyl & Plas**.

Decoroproetus decorus (Barr.) p. 320, **Horný**.

Deiphon forbesi Barr. p. 207, **Svoboda & Prantl** (1).

Deiracephalus aster (Walcott) p. 759 pl. lxxxix fig. 5, **Palmer** (1).

Deissella Howell & Duncan 1939 a synonym of *Bolaspidella* Resser 1937 p. 739, **Palmer** (1).

Delaria Weller 1944 referred to Phillipsiinae p. 410, **Příbyl**.

Deltophthalmus [recte *Deltophthalmus*] Resser 1938 a synonym of *Bolaspidella* R. 1937 [quod vide] p. 739, **Palmer** (1).

Denckmanites see *Phacopidella*.

Denckmannites see *Phacopidella*.

Densonella sp. p. 742 pl. lxxxiii fig. 7, **Palmer** (1).

Diacalymene Kegel 1927 emend. Shirley 1936 referred to Calymeninae p. 225, **Hupé** (4).

Diacalymene diademata (Barr.) p. 379, *D. tenera* (B.) p. 381, **Horný**.

Diacanthaspis recorded p. 1436, **Evitt**.

Dianops see *Phacops*.

Dicellosephalus ? *villebruni* Bergeron type of *Asaphopsoides* gen. n. p. 173, **Hupé** (4).

Diceratocephalidae fam. n. for *Diceratocephalus* gen. n. p. 419 (431), **Lu Acta palaeont. sinica** 2 4 1954.

Diceratocephalus gen. n. [*Diceratocephalidae*] p. 419 (431) for type *D. armatus* sp. n. p. 420 (433) pl. i figs. 1-9 text-figs. 1-3 (drawings), *D. latifrons* sp. n. p. 421 (435) pl. i figs. 10-11 Cambrian (Upper) Manchuria; *Blackwelderia* ? *cornuta* Endo 1937 *partim* [cranidia pl. 63 figs. 1-3] may belong to *D. a.* or *D. l.* p. 433, **Lu Acta palaeont. sinica** 2 4 1954.

Diceratopyge Troedsson 1937 referred to *Ceratopyginae* p. 67, **Kobayashi & Ichikawa**.

Diceratopyge troedssoni sp. n. Ordovician (Tremadoc) Germany (Hof) p. 21 pl. iv figs. 93-94 text-figs. 15-17 (drawings), **Sdzuy Abh. senckenb. naturf. Ges. No. 492** 1955.

Dichelepyge Harrington & Leanza 1952 referred to *Ceratopyginae* p. 67, **Kobayashi & Ichikawa**.

Dicranopeltis scabra (Beyr.) p. 207, **Svoboda & Prantl** (1).

Dicranopeltis scabra (Beyr.) p. 379, *D. scabra* (B.) n. var. [undescribed] p. 360, **Horný**.

Dicranopeltis scabra (Beyrich) var. p. 526, **Svoboda & Prantl** (4).

Dicranurus monstrosus (Barr.) p. 154, **Chlupáč** (2).

Dictyella subquadrans n. sp. [nom. nud.] p. 38, *D. sp.* p. 7, **Endo** (1).

Dictyella trigonalis Kobayashi p. 109, **Endo** (2).

Dienstina see *Phacopidella*.

Dikelocephalid remains recorded p. 460, **Okulitch & Bell**.

Dikelocephalidae — close affinity with Richardsonellidae denied p. 25, resemblances to Anomocaridae may be homeomorphic p. 36, **Sdzuy**.

Dikelocephalidae (Dikelocephalinae) see *Manchurocephalus* gen. n.

Dikelocephalus celticus Salter 1866 probably belongs to *Pterocephalina* p. 37, **Sdzuy**.

Dikelocephalina Brögger 1896 relations to *Pterocephalina* (*Leimitzia*) subgen. n. p. 37, *D. sp. A* p. 38 pl. vii figs. 98-100, *D. sp. B* p. 39 pl. vii fig. 1 Ordovician (Tremadoc) Germany (Hof), **Sdzuy**.

Dikelocephalinae see *Asaphopsoides* gen. n.

Dikelocephalinae Kobayashi 1936 referred to Anomocaridae and taken to include *Dikelocephalina*, *Asaphopsis*, *Hungioidea* & *Dactylocephalus* p. 37, **Sdzuy**.

Dimeropyge raymondi (Roy 1941) holotype refigured p. 145 pl. lxiii figs. 7, 8, 11, 12, 15, 16, **Whittington** (1).

Dimeropygidae — *Dimeropygiella* Ross 1951 referred p. 124, **Hupé** (4).

Dimeropygiella Ross 1951 referred to Dimeropygidae p. 124, **Hupé** (4).

Dimeropygiella eos sp. n. Ordovician (Lower) Canada (B.C.) p. 456 pl. vi fig. 10, **Kobayashi J. Fac. Sci. Tokyo Univ.** [2] 9 1955.

Dimeropygiella n. spp. a & b [undescribed] p. 16, **Hintze** (1).

Dindymene sp. p. 4, **Röhlich & Chlupáč**.

Dinesidae Lermontova 1940 discussed p. 108, **Lermontova** (1).

Dinesus Etheridge 1896 discussed p. 113, *D. ida* E. discussed p. 114, *D. kirghizensis* [kirghizensis on p. 174] sp. nondescribed. p. 118 pl. xvi figs. 4, 4', 4a-c Cambrian (Middle) U.S.S.R. (Kazakhstan), **Lermontova** Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Dionide Barrande 1847 validated by suppression of *Polytomurus* Corda 1847 and placed on Official List of Generic Names p. 453, **Opinion 350**.

Dionideae Gürich 1907 emended to Dionididae [quod vide], **Direction 28**.

Dionididae [emended from Dionideae] Gürich 1907 placed on Official List of Family-Group Names p. 496, **Direction 28**.

Diplagnostus indianus sp. n. Cambrian (Middle) Argentina (Mendoza) p. 14 pl. i fig. 13, **Rusconi Rev. Mus. Hist. nat. Mendoza** 8 1-4 1955.

Dipleura see *Homalonotus*.

Dipleuropyge gen. n. [Incertae sedis] for type *D. striata* sp. n. p. 30 pl. iii figs. 3-10 Cambrian (Upper) U.S.S.R. (Kazakhstan), **Lermontova** Upper Cambrian trilobites and brachiopods from Boshche-Kulya, 1951.

Distazeris Raymond 1937 compared with *Utiadae* p. 131, **Hupé (4)**.

Ditomopyge Newell 1931 emend. Weller 1936 referred to *Phillipsiinae* p. 410, **Frýbýl**.

Ditomopyge Newell 1931 — *Neophillipsia* Gheyselsinec 1937 a synonym p. 188, **Hupé (4)**.

Ditomopyge from Nevada p. 2247, **Dott**.

Ditomopyginae Hupé 1953 a synonym of *Phillipsiinae* p. 409, **Frýbýl**.

Dolichoharpes arctica sp. n. p. 146 pl. lxiii figs. 17-19 Ordovician (? Upper) Canada (Baffin I.), **Whittington** Mem. geol. Soc. Amer. No. 62 1954.

Dolichometopsis bicensis Rasetti listed p. 3, **Rasetti**.

Dorypyge quadriceps (Rjónsnitzky) type of *Jakutus* gen. n. p. 105, **Lermontova (1)**.

Dorypyge richthofeni Dames — following considered synonyms *D. pergranosa*, *D. matsushitai*, *D. bigranosa*, (tentatively) *D. toyamai*, *D. damesi* [partim] (pl. 31 figs. 14-16) Resser & Endo 1937 spp. p. 61; *D.* sp. listed p. 15, *D. hispinosa* Walcott p. 29, *D. kidoi* R. & E. p. 41, **Endo (1)**.

Dorypyge richthofeni Dames p. 110, **Endo (2)**.

Dorypyge richthofeni Dames p. 428, **Lu**.

Dorypyge richthofeniformis Lermontova p. 11 pl. i figs. 1-5, **Lermontova (2)**.

Dorypygella — *Teinistion obtusus* and *T. sulcatus* Endo 1937 referred tentatively p. 93, **Kobayashi (2)**.

Dorypygellinae metaprotaspides p. 90 pl. xiv figs. 14 a-b, 15 a-b, **Kobayashi (2)**.

Dorypygidae Kobayashi discussed p. 118, **Lermontova (1)**.

Drepanura inutilis Resser & Endo 1937 a synonym of *D. pusilla* R. & E.; *D. ketteleri* of Kobayashi 1935, ? *D. intermedia* R. & E. partim, *D. mina* R. & E. partim, ? *D. ? concentrica* E. & R. partim all in synonymy of *D. premesnili* Bergeron p. 68; *D. intermedia* R. & E. partim and *D. mina* R. & E. partim in synonymy of *D. ketteleri* Monke p. 69; *D.* sp. listed p. 14, **Endo (1)**.

Drepanura premesnili Bergeron p. 110, **Endo (2)**.

Drepanura premesnili Bergeron p. 425ff., **Lu**.

Drevermannia Richter 1913 so dated and tentatively referred (following Richter 1951 non 1950) to *Proetinae* p. 504, *D. (Eodrevermannia)* Frýbýl 1946 discussed, *D. (E.) bouškai* P. p. 508 pl. i fig. 6, *D. (E.) rara* sp. n. Devonian (Middle) Czechoslovakia p. 509 pl. i figs. 3-5, *D. (E.) nitida* Růžička 1946 so dated [considered nom. nud. 1941] lectotype p. 510 pl. i figs. 1-2 [photographs], *D. (Formonia)* R. & E. Richter compared with *D. (Eodrevermannia)* p. 507, **Frýbýl & Plas** *Sborn. úst. Úst. geol.* 21 [Pal.] 1955.

Drevermannia (Formonia) scheldana Matern 1927 holotype refigured p. 56 pl. ii fig. 9, **R. & E. Richter (1)**.

Drevermannia (Drevermannia) schmidtii pp. 225, 247, *D. (D.) cf. s.* p. 247, *D. spp.*, *D. n. sp.* [undescribed] p. 247, **Rabien**.

Ductina see *Phacopidella*.

Dunderbergia Walcott 1924 discussed with description, pygidium newly assigned, *Megadunderbergia* Kobayashi 1939 rejected as being not a distinctive subgenus, *D. variagranula* sp. n. Cambrian (Upper) U.S.A. (Texas) p. 761 pl. lxxxviii figs. 7, 9, 10, pl. lxxxix fig. 1; *D. nitida* (Hall & Whitfield) pygidium originally assigned is referred to *Housia* sp., **Palmer J. Paleont.** 28 6 1955.

Dytremacephalus gen. n. [Ptychopariidae] p. 749 for type *D. granulatus* sp. n. p. 750 pl. lxxxv figs. 5-6, *D. laevis* sp. n. p. 750 pl. lxxxv figs. 1, 4 Cambrian (Upper) U.S.A. (Texas), **Palmer J. Paleont.** 28 6 1955.

Edmundsonia Cooper 1953 referred to *Endymioniidae* p. 264, **Hupé (4)**.

Ehmania cf. *E. wyomingensis*, *E. wolcottii*, *E.* sp., *E.?* sp. p. 1394, **McMannis**.

Eilura typa Resser & Endo with ascribed cranidium p. 83 pl. iii figs. 13–15, *E. quadrata* *E.* p. 28, **Endo (1)**.

Ellipsocephalus hoffii Schloth. p. 184 ff. pl. i [illustration of luma-chelle], **Havlíček & Šnajdr**.

Elrathia manchuriensis Resser & Endo a synonym of *Ptychoparia orientalis* R. & E. p. 73, *E. convexa* R. & E. of *E. iddingsi* R. & E. p. 74; *E. yentaiensis* sp. n. p. 74 pl. viii figs. 9–11 Cambrian (Upper), *E. taiizuensis* sp. n. p. 75 pl. iii figs. 6–8, *E. rara* sp. n. p. 75 pl. iii fig. 9, *E. sobyosiensis* sp. n. p. 75 pl. iii fig. 10 Cambrian (Middle) Manchuria, *E. hoboii* R. & E. p. 13, *E. conoidea* *E.* p. 20, *E.* cfr. c. p. 14, **Endo Bull. cent. nat. Mus. Manchoukuo No. 7 1944**.

Elvinia roemeri (Shumard) with synonym *E. texana* Resser [refigured] pl. xxxviii figs. 21–22, *E. shumardi* R. types refigured pl. xxxviii figs. 23–24, **Cloud & Barnes**.

Elvinia roemeri (Shumard), *E.* n. sp. [undescribed] p. 1515, **Wilson (1)**.

Elvinia tetonensis recorded p. 460, **Okulitch & Bell**.

Elviniinae see *Neotaenicephalus* and *Vermilionites* **genn. n.**

Emmrichellidae see *Metabourmania* and *Macroculites* **genn. n.** and *Amechilus*.

Emmrichellidae — *Stenocombus* tentatively referred p. 131, **Hupé (4)**.

Encrinurid ? ind. gen. p. 423 pl. xl fig. 112, **Whittington (2)**.

Encrinuridae classified into Cybelidae [sic] and Encrinurinae p. 271, **Hupé (4)**.

Encrinurinae newly considered a subfamily of Encrinuridae to include *Cryptonymus*, *Encrinurus*, *Cromus*, *Atractopyge*, *Encrinurella*, *Dindymene*, *Plasiaspis*, *Encrinuroides* and *Bevanopsis* p. 253, **Hupé (4)**.

Encrinuroides sp. ind. for *Encrinurus* sp. ind. Roy 1941 p. 131, **Whittington (1)**.

Encrinurus beaumonti (Barr.) p. 1, **Růžicka & Bouška**.

C. (Encrinurus) beaumonti (Barr.) p. 382, **Svoboda & Prantl (2)**.

Encrinurus bowringensis Foerste recorded p. 1052, **Crook**.

Encrinurus (Encrinurus) intercostatus (Barr.), *E. (Cromus) beaumonti* (B.) p. 579, **Bouček & Přibyl**.

Encrinurus punctatus p. 216, **Straw**.

Encrinurus raricostatus (Walcott) p. 33, **Baillie**.

Encrinurus sulfureanus sp. n. p. 4 [unillustrated] Ordovician Argentina (Mendoza), **Rusconi Bol. paleont. B. Aires No. 30 1954**.

Encrinurus sulfureanus Rusc. illustrated p. 58 pl. iv fig. 8, **Rusconi (5)**.

Encrinurus (E.) transiens (Barr.) p. 346 ff., *E.* aff. t. p. 365, *E.* sp. p. 364, *E. (Cromus) beaumonti* (B.) p. 323 ff., **Horný**.

Encrinurus (Encrinurus) cf. transiens (Barrande), *E. (Cromus) beaumonti* (B.), *E. (C.) cf. bohemicus* (B.) pp. 524–525, **Svoboda & Prantl (4)**.

Encrinurus sp. listed p. 112, **Lawson**.

Encrinurus sp. p. 154, **Wilson in Fortier**.

Encrinurus sp. ind. Roy 1941 referred to *Encrinuroides* p. 131, **Whittington (1)**.

Endymioniidae — *Edmundsonia* Cooper 1953 referred p. 264, **Hupé (4)**.

Entomaspidae referred to Harpoidae p. 258, **Hupé (4)**.

Entorachis subgen. n. see *Psilaspis*.

Eobronteidae Sinclair 1949 a subjective synonym of Scutelluidae **nom. n.** [quod vide], **R. & E. Richter (2)**.

Eobronteus grayi (Reed 1904) type of *Craigheadia* **gen. n.** p. 206, **Hupé (4)**.

Eocyphinium Reed 1942 referred to Phillipsinae p. 410, **Přibyl**.

Eodiscidae see Dawsonidae.

Eodisc[id]s recorded from E. Greenland p. 25, J. W. Cowie in Winsnes.

Eodrevernannia see *Drevernannia*.

Eohomalonotus bohemicus (Barr.) p. 6, Röhlich & Chlupáč.

Eohomalonotus? sp. p. 236, Marek (1).

Eohomalonotus n. sp. [undescrib.] p. 8, Marek (2).

Eomonorachus Delo 1935—suggested that name should not be used as originals of the type *Dalmanites intermedius* Walcott 1877 have not been found p. 135, *E. deloi* Roy 1941 a synonym of *Calliops brevis* (R. 1941) p. 132, Whittington (1).

Eomonorachus intermedius, *E.* sp. p. 761, Weiss.

Eoptychoparia gen. n. [Ptychopariidae (Antagminae)] p. 13 for type *E. normalis* sp. n. p. 14 pl. i fig. 2 (drawing), pl. iii figs. 5–11, *E. angustifrons* sp. n. p. 15 pl. iii figs. 1–4, *E. intermedia* sp. n. p. 16 pl. iii figs. 12–15 Cambrian (Lower) Canada (Quebec) [in boulders]; *Ptychoparella taylori*, *P. minor* and [?] *P. walcotti* Resser spp. referred to *E.* p. 14, Rasetti Smithsonian. misc. Coll. 128 7 1955.

Eoshumardia gen. n. [nondescrib.] 1953 [Shumardiidae] p. 134 for type *Shumardia orientalis* Mansuy 1916 Cambrian (Upper) Yunnan text-fig. 134 bis (7) drawing, Hupé Ann. Paléont. 41 1955.

Erbia sibirica (Schm.) p. 112 pl. xvi fig. 2, *E. granulosa* Lerm. refigured p. 112 pl. xvi fig. 3, Lermontova (1).

Erbia sp. p. 27 pl. ii fig. 11, *E. spinulosa* sp. n. [nom. nud.] p. 27 Cambrian (Middle) U.S.S.R. (Kazakhstan), Lermontova (2).

Erbia sp. table 1, Zelenov, Zhuravleva & Korde.

Eremiproetus see *Proetus*.

Eremiproetus cf. *eremita* (Barr.) p. 223, Svoboda & Prantl (1).

Eremiproetus cf. *vicinus* (Barrande) [after record of J. Péneau] p. 17, Pillet (2).

Eteraspis Resser 1935 referred to *Lenopariidae* p. 116, Hupé (4).

Eudolotites angelini (Barr.) p. 3 ff., Röhlich & Chlupáč.

Euloma Angelin referred to Ptychopariidae (Eulominae) subfam. n. p. 449, Kobayashi (1).

Euloma Angelin 1854 discussed and referred to Olenidae incertae subfamiliae [quod vide], *Highgateella* a near relation p. 18, *E. geinitzi* (Barrande 1868) neotype p. 19 pl. iii figs. 77–89 (?87), pl. iv figs. 90–92, text-figs. 12–14, *E. monile praemonile* Lake considered very close to *E. geinitzi* p. 20; *Crossura* Moberg & Segerberg 1906 may be a young form of *Euloma* p. 40, Sdzuy.

Euloma sp. p. 118, Bohlin.

Eulomella gen. n. [Ptychopariidae (Eulominae)] p. 450 for type *E. mckayensis* sp. n. Ordovician (Lower) Canada (B.C.) p. 451 pl. vi fig. 3, pl. ix fig. 1 (restored), Kobayashi J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Eulomina Kobayashi 1931 referred tentatively to Eulominae subfam. n. p. 450, Kobayashi (1).

Eulominae subfam. n. [Ptychopariidae] p. 449 for *Euloma*, *Pareuloma*, & *Eulomella* gen. n. [? and tentatively *Eulomina* p. 450], Kobayashi J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Eurudagnostus gen. n. [Rudagnostidae] p. 7 for type *E. grandis* sp. n. p. 8 pl. ii figs. 1, 2, 3, 3a, 4, *E. ? brevispinus* sp. n. p. 9 pl. ii figs. 5, 6, 6a, 7, pl. i fig. 1 pars 6 [where referred to *Rudagnostus*] Cambrian (Upper) U.S.S.R. (Kazakhstan), Lermontova Upper Cambrian trilobites and brachiopods from Boshche-Kulya, 1951.

Evansaspis subgen. n. see *Leioste-gium*.

Exochops Weller 1936 referred to Phillipsiinae, may be a subgenus of *Griffithides* Portlock 1843, Příbyl.

Eymekops granulosa [*E. ? granulosa* p. 21] sp. n. p. 77 pl. iii fig. 12, *E. quadrilateralis* sp. n. p. 77 pl. iii fig. 11 Cambrian (Middle) Manchuria, *E. obsoleta* Resser & Endo p. 22, *E. hermus* (Walcott) p. 34, Endo Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Eymekops quadr ateralis Endo p. 110, **Endo** (2).

Fengtienia peculiaris Endo p. 110, **Endo** (2).

? *Fieldaspis minuta* sp. n. p. 3 [unillustr.] Cambrian (Middle) Argentina (Mendoza), **Rusconi** Bol. paleont. B. Aires No. 32 1955.

? *Feldaspis minuta* Rusc. illustrated p. 17 pl. ii fig. 5, **Rusconi** (5).

Fissocephalus gen. n. [? *Burlingii*-dae] p. 15 for type *F. expansus* sp. n. p. 16 pl. vi fig. 1, *F. extumidus* sp. n. p. 17 pl. vi figs. 2-3, *F. limbatus* sp. n. p. 17 [unillustr.] Cambrian (Upper) U.S.S.R. (Kazakhstan & Siberia), **Lermontova** Upper Cambrian trilobites and brachiopods from Boshche-Kulya, 1951.

Flexicalymene Shirley 1936 referred to *Colpocoryphinae* subfam. n. p. 225, **Hupé** (4).

Flexicalymene croneisi (Roy 1941) for *Calymene* c. R. restr. [non fig. 124d] holotype refigured p. 147 pl. lxii figs. 13-15, **Whittington** (1).

Flexicalymene sp. p. 1988, **Fisher**.

Flexicalymene recorded p. 1436, **Evitt**.

Formonia see *Drevermannia*.

Fuchovia manchuriensis (Walcott) — *F. quadrata* Resser & Endo 1937 a synonym p. 61, **Endo** (1).

Genevievella Lochman 1936 — *Llanoaspis* L. 1938 not a synonym, Resser's 1938 spp. of *G.* referred to *Llanoaspis* [quod vide], *G.* cf. *G. spinosa* L. p. 736 pl. lxxxiii figs. 3, 5, 6, **Palmer** (1).

Genevievella rogersvillensis Resser type of *Rogersvillia* gen. n. p. 162, **Hupé** (4).

Genevievellidae see *Rogersvillia* gen. n.

Geragnostidae Howell a synonym of Agnostinae p. 13, **Sdzuy**.

Geragnostinae discussed p. 88, *Lotagnostus* Whitehouse referred p. 91, **Palmer** (2).

Geragnostus Howell 1935 discussed p. 88, *G. tumidosus* (Hall & Whitfield) for *Agnostus* t. H. & W. 1877 holotype refigured and variation discussed p. 89 pl. xix figs. 3-4, pl. xx figs. 1-3, 12, 15, *G. brevis* sp. n. p. 91 pl. xix figs. 1-2 Cambrian (Upper) U.S.A. (Nevada), **Palmer** J. Paleont. 29 1 1955.

Geragnostus Howell 1935 discussed and *Micragnostus* H. 1935 a synonym p. 14, *G. bavaricus* (Barrande 1868) for *Agnostus* b. B. neotype chosen & figured p. 14 pl. ii figs. 49-57, 100-101, text-fig. 8, **Sdzuy**.

Geragnostus hirundo (Hicks) [of which *G. fritschii* (Holub) may be a synonym] holotype refigured p. 7 pl. i figs. 1-4, *G. maccoyi* (Salter) lectotype chosen and figured p. 8 pl. i figs. 5-6, *G. caducus* (Barrande) [holotype refigured text-fig. 2a] from Shropshire p. 8 pl. i figs. 7-8, **Whittard**.

Geragnostus aff. *mundus* (Raymond) for aff. *Peronopsis* m. R. 1925 p. 475 pl. vii fig. 1, pl. viii fig. 17, **Kobayashi** (1).

Geragnostus cf. *G. tumidosus* (Hall & Whitfield) so referred p. 719 pl. lxxvi figs. 4, 6, **Palmer** (1).

Geragnostus (*Corrugatagnostus*) see *Corrugatagnostus*.

Girvanagnostus Kobayashi 1939 distinction from *Trinodus* doubtful p. 7, **Whittard**.

Glabrella Lermontova 1940 referred with query to Eodiscidae, *G. ventrosa* Lermontova p. 28 pl. ii figs. 1-4, **Lermontova** (2).

Gladiatoria gen. n. [Asaphidae (Macropyginae)] p. 201 for type *Macropyge gladiator* Ross Ordovician (Lower) U.S.A. (Idaho), **Hupé** Ann. Paléont. 41 1955.

Glossopleura — the following Rusconi spp. of *Asaphus* referred: *limbatus* R. 1946, *inexsulcatus* R. 1946, *asperoensis* R. 1952, *acequionensis* R. 1954 p. [2], **Rusconi** (1).

Glossopleura leona Lochman 1952 (tentatively) and *G.* sp. L. referred to *Sonoraspis* p. 468, **Stoyanow & Susuki**.

? *Glossopleura pedemontana* sp. n. p. 18 pl. i fig. 15 Cambrian (Middle) Argentina (Mendoza), *G. inexcusata* (R.) and *G. limbata* (R.) p. 8, **Rusconi** Rev. Mus. Hist. nat. Mendoza 8 1-4 1955.

Glyphaspis Poulsen 1927 referred to Paracoosiinae p. 37, **Sdzuy**.

Glyphaspis cf. *G. perconcava* Poulsen. G. sp. p. 1394, **McMannis**.

Goldiidae Raymond 1913 a synonym of Scutelluidae nom. n. [quod vide], **R. & E. Richter** (2).

Goniagnostus attenuatus sp. n. p. 2 [unillustr.] Cambrian (Upper) Argentina (Mendoza), **Rusconi** Bol. paleont. B. Aires No. 31 1955.

Goniagnostus attenuatus Rusc. illustrated p. 28 pl. ii figs. 13-14, **Rusconi** (5).

Gonioteloides gen. n. [?Bathyuriidae] p. 446 for type *G. monoceros* sp. n. p. 447 pl. vi figs. 17a-b, 18a-b, pl. viii fig. 10, *G. punctatus* sp. n. p. 448 pl. vi figs. 19a-b Ordovician (Lower) Canada (B.C.), **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Goniotelus spp. A, B, C, D [undescribed] p. 17, **Hintze** (1).

Grandagnostus Howell 1935—*Battus nudus* Beyrich [quod vide] cannot be referred p. 926, **Howell** (2).

Grandagnostus Howell 1935 a synonym of *Leiagnostus* Jaekel 1909 p. 15, **Sdzuy**.

Granularia Pol. [?Poletayeva] discussed, *G. obrutchevi* P. p. 148 pl. xxi figs. 1, 1a-e, *G. protolenorum* sp. n. p. 148 pl. xxi figs. 2, 2a Cambrian (Lower) U.S.S.R. (Yakutsk), *G. bidjensis* P. and *G. babakovi* P. mentioned p. 147, **Lermontova** Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Granularia sp. table 1, **Zelenov, Zhuravleva & Korde**.

Granularidae Pol. [?Poletayeva] discussed p. 147, **Lermontova** (1).

Gravicalymene Shirley 1936 referred to Colpocoryphinae subfam. n. p. 225, **Hupé** (4).

Greylockia Raymond 1937 referred to Lecanopleurinae subfam. n. p. 137, **Hupé** (4).

Griffithides Portlock 1843 referred to Phillipsiinae; *Bollandia*, *Paragriffithides* & *Particeps* Reed 1943 considered either synonyms or subgenera p. 411, *Exochops* Weller 1936 may be a subgenus of *G.* p. 410, **Přibyl**.

Griffithides cf. *barkei* Woodward listed p. 460, **Owen & Jones**.

Griffithides marginatus sp. n. p. 345 pl. liii figs. 7-8 Carboniferous (Lower) U.S.A. (Ohio), **Hyde** Bull. geol. Surv. Ohio No. 51 1953.

Griffithides moorei p. 335, **Shaw & Bell**.

Griffithides pustulosus p. 1437, **Huffman**.

Griffithidinae Hupé 1953 a synonym of Phillipsiinae p. 409, **Přibyl**.

Hagiorites Kobayashi 1951 referred tentatively to Paracoosiinae p. 37, **Sdzuy**.

Haniwa sasanensis Kobayashi p. 8, **Endo** (1).

Hapsiceraurus gen. n. [Cheirurinae] for type *H. hispidus* sp. n. for *Ceraurus pleurexanthemus* of Schuchert 1900 and possibly including *C. cf. horridus* of Roy 1941 Ordovician (? Upper) Canada (Baffin I.) p. 125 pl. lix figs. 1-7, pl. lx fig. 19; *C. horridus* Troedsson 1928 *partim* (cephalon) referred to *H.* p. 127, **Whittington** Mem. geol. Soc. Amer. No. 62 1954.

Hardyia metion? of Kindle 1929 may belong to *Lunacrania* gen. n. p. 472, **Kobayashi** (1).

Harpes bupthalmus Bouč. p. 334, *H. ungula* Barr. p. 347, *H.* sp. p. 367, **Horný**.

Harpes macrocephalus p. 285, **Struve**.

Harpes cf. *macrocephalus* (Goldf.), *H.* sp. p. 26, **Krömmelbein et al.**

Harpes microporus Nov., *H.* sp. p. 314, **Chlupáč** (1).

Harpes montagnei Barr. p. 219, *H. transiens* B. p. 225, **Svoboda & Prantl** (1).

Harpes montagnei Hawle & Corda p. 438, **Svoboda & Prantl** (3).

Harpes ruderalis Hawle & Corda p. 529, **Svoboda & Prantl** (4).

Harpes ungula (Sternb.) p. 579, *H. cf. u.* p. 582, Bouček & Přibyl.

Harpes ungula (Stbg) p. 383, Svoboda & Prantl (2).

Harpes venulosus Hawle & Corda with damaged brim p. 121 text-fig., Prantl (1).

Harpes venulosus, *H. convexus*, *H. reticulatus* Hawle & Corda spp., *H. cf. dorbignanus* Barr., *H. sp.* p. 153, Chlupáč (2).

Harpes (s.l.) ind. sp. A. Whittington 1950 listed p. 399, Whittington (2).

Harpoidae taken to include ? Hypotheticidae, Loganopeltidae, Harpididae, Harpidae and Entomaspidae p. 253, Hupé (4).

Hausiella see *Housiella*.

Hebediscus Whitehouse 1936 discussed p. 20, *H. ponderosus* sp. n. p. 21 pl. iii figs. 4, 4a, *H. p.?* p. 22 pl. iii fig. 3 Cambrian (Lower) U.S.S.R. (Siberia), Lermontova Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Hebediscus ponderosus Lerm. table 1, Zelenov, Zhuravleva & Korde.

Hemibarrandia triangula sp. n. (which may be the same as *Pronileus illoeniformis* Pompeckj in Wurm 1925) p. 24 pl. iv figs. 95–96, text-fig. 20 Ordovician (Tremadoc) Germany (Hof), Sdzuy Abh. senckenb. naturf. Ges. No. 492 1955.

Hemigyraspis [Raymond 1910] a synonym of *Asaphellus* Callaway 1877 p. 436, Kobayashi (1).

Hemirhodon Raymond may be close to the ancestors of Styginidae p. 24, Skjeseth.

? *Hemirhodon serranus* sp. n. p. 1 [unillustr.] Cambrian (Upper) Argentina (Mendoza), Rusconi Bol. paleont. B. Aires No. 30 1954.

? *Hemirhodon serranus* Rusc. illustrated p. 36 pl. ii fig. 9, Rusconi (5).

Heterocaryon Raymond 1937 compared with Otariioninae p. 126, Hupé (4).

Highgatella gen. n. ["modified Olenid?"] for type *Terranovella gelasinata* Shaw 1951 Ordovician (Tremadoc) [not Upper Cambrian] U.S.A. (Vermont) p. 187, Shaw J. Paleont. 29 1 1955.

Highgatella Shaw 1955 affinities to *Euloma* discussed and referred to Olenidae incertae subfamiliae p. 19, Sdzuy.

Hoekaspiella mendozana, *H. magna*, *H. spinosa* Rusc. spp. p. 8, Rusconi (5).

Holanshanian gen. nondescr. for type *H. ninghsiaensis* Tu MS. [nom. nud.] p. 432 text-fig. 4 (drawing), Tu in Lu.

Holcacephalus Resser 1938—*Norwoodina* Lochman 1940 a synonym, *H. cf. H. tenerus* (Walcott) p. 742 pl. lxxxiv fig. 3; *H. granularis* R. a synonym of *H. tenerus*, Palmer (1).

Holcacephalus see Genus and species undet. 2.

Holometopus törnquisti Moberg & Segerberg 1906 referred with query to *Bronteopsis* p. 19, *H. limbatus* Angelin and *H. nitens* Wiman see *Raymondaspis*, Skjeseth.

Homagnostus Howell — *Aagnostus tumidosus* Hall & Whitfield cannot belong p. 89, Palmer (2).

Homagnostus lochmanae Howell & Duncan p. 1394, McMannis.

Homagnostus cf. manantialensis Rusc. p. 9, Rusconi (5).

Homagnostus sp. p. 425, Lu.

Homalonotus aculeatus Koch p. 148 pl. xx figs. 6–7, *H. group armatus* Burmeister p. 148 pl. xx figs. 9–13, pl. xxi fig. 14, cf. *H. perarmatus* Frech [no cf. on pl. expl.] p. 149 pl. xx fig. 8, *H. pradoanus* de Verneuil p. 149 pl. xx figs. 1–4, pl. xxi fig. 16, *H. sp.* p. 150, *H. (Dipleura) simplex* R. & E. Richter p. 150 pl. xx figs. 5 a–b, 14, pl. xxi fig. 15 all from Sahara, Le Maitre (2).

Homalonotus cf. knighti Konig p. 218, Straw.

Homalonotus sp. p. 19 ff., Krömmelbein et al.

Homalops Remelé 1885 stated to be a junior homonym of an unspecified genus p. 134n, Whittington (1).

Homoglossa Raymond 1912 a synonym of *Bronteopsis* to which its type *Ogygiocaris panderi* Schmidt is referred p. 19, Skjeseth.

Hospes Stubblefield & Bulman 1927 referred to Shumardiidae, *H. nanus* sp. n. p. 29 pl. v figs. 34–39 text-figs. 27 (reconstruction)–30 Ordovician (Tremadoc) Germany (Hof), Sdzuy Abh. senckenb. naturf. Ges. No. 492 1955.

Housia Walcott 1916 referred to Housiinae [quod vide] p. 67, Kobayashi & Ichikawa.

Housia sp. revised assignment of pygidium originally attributed to *Dunderbergia nitida* (Hall & Whittington) p. 761, Palmer (1).

Housiella [in places spelt *Hausiella*] gen. n. [Ceratopygidae (Housiinae)] for type *Ceratopyge canadensis* Walcott 1912 p. 66 pl. xi fig. 12 (drawing), Kobayashi in Kobayashi & Ichikawa Trans. palaeont. Soc. Japan NS No. 19 1955.

Housiinae [?Ceratopygidae] nov. [recte Hupé] for *Housia* and *Housiella* [or *Hausiella*] gen. n. p. 67, Kobayashi in Kobayashi & Ichikawa Trans. palaeont. Soc. Japan NS No. 19 1955.

Howellaspis Lochman & Denson 1944 a synonym of *Bolaspidella* Resser 1937 [quod vide] p. 739, Palmer (1).

Hsiaoshia gen. n. [Asaphiscidae] p. 91 for type *H. quadrata* sp. n. p. 92 pl. i figs. 18–20 Cambrian (Middle) Manchuria, Endo Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Huaquinchia gen. n. [no family assigned], *H. spinosa* sp. n. p. 2 [unillustr.] Cambrian (Upper) Argentina (Mendoza), Rusconi Bol. paleont. B. Aires No. 32 1955.

Huaquinchia Rusconi referred to Huaquinchaidae fam. n., *H. spinosa* Rusc. illustrated p. 39 pl. iii fig. 7, Rusconi (5).

Huaquinchaidae fam. n. for *Huaquinchia* Rusconi p. 39, Rusconi Rev. Mus. Hist. nat. Mendoza 8 1–4 1955.

Huilichia gen. n. [no family assigned], *H. trispinata* sp. n. p. 4 [unillustr.] Cambrian (Middle) Argentina (Mendoza), Rusconi Bol. paleont. B. Aires No. 32 1955.

Huilichia Rusconi 1955 referred to Oryctocephalidae, *H. trispinata* Rusc. illustrated p. 22 pl. i fig. 6, Rusconi (5).

Hungaiinae Raymond 1924 referred to Anomocaridae p. 37, Sdzuy.

Hydrocephalus saturnoides p. 189, Havlíček & Šnajdr.

Hypagnostus andinus Rusc. illustrated p. 13 pl. i fig. 12, *H. huilichensis* Rusc. illustrated p. 29 pl. iii fig. 12, *H. sp.* p. 9, Rusconi (5).

Hypagnostus huilichensis sp. n. p. 2 [unillustr.] Cambrian (Upper), *H. andinus* sp. n. p. 3 [unillustr.] Cambrian (Middle) Argentina (Mendoza), Rusconi Bol. paleont. B. Aires No. 32 1955.

Hypagnostus parvifrons p. 110 ff., *H. p. mammilatus* p. 116 ff., Spjeldnaes.

Hyperagnostus gen. n. [Agnostidae] p. 474 for type *H. binodosus* sp. n. Ordovician (Lower) Canada (B.C.) p. 475 pl. vii figs. 2–3, pl. ix fig. 4 (drawing), Kobayashi J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Hyperbolochilus Ross 1951 referred to Asaphiscidae [or Bathyruridae p. 424], *H. expansus* sp. n. Ordovician (Lower) Canada (B.C.) p. 422 pl. iii fig. 1, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Hypodicranotus salteri [? var. *giranensis*] (Reed) so referred text-fig. 162 (3) reconstruction, Hupé (4).

Hypodicranotus sp. ind. [for *Remopleurides* sp. Roy 1941] p. 120, Whittington (1).

Hypotheticidae Hupé 1953 referred with query to Harpoidae p. 254, Hupé (4).

Hysterolenus Moberg 1898 referred to Ceratopyginae p. 67, Kobayashi & Ichikawa.

Hysterolenus? *glabrus* sp. n. p. 32 pl. iii fig. 1, *H.*? sp. p. 32 pl. iii fig. 2 Cambrian (Upper) U.S.S.R. (Kazakhstan), **Lermontova** Upper Cambrian trilobites and brachiopods from Boshche-Kulya, 1951.

Hysterolenus sp. p. 8, **Endo** (1).

Hysteropectura Raymond 1937 referred to *Toxotididae* fam. n. p. 135, **Hupé** (4).

Hysteropectura Raymond 1937 a synonym of *Bolaspidella* Resser 1937 p. 739, **Palmer** (1).

Hystriculus [recte *Hystricurus*] *granosus* Endo p. 108, **Endo** (2).

Hystricuridae — *Jeffersonia* referred p. 122, **Hupé** (4).

Hystricurus platypleurus sp. n. p. 454 pl. vi fig. 6, *H.* cfr. *genalatus* Ross p. 454 pl. vi figs. 1-2, *H.* sp. p. 455 pl. vi fig. 8, *H.*? sp. p. 455 Ordovician (Lower) Canada (B.C.), **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Hystricurus n. spp. a & b [undescribed] pp. 12-13, **Hintze** (1).

Hystricurus sp. pl. xxxviii fig. 15, *H.*? sp. pl. xxxviii figs. 16, 18, *H.* aff. *H. missouriensis* Ulrich pl. xxxviii figs. 17, 19-20, *H.* sp. pl. xli figs. 32-33, **Cloud & Barnes**.

Illaenidae relations to Styginidae via *Protostygina* p. 24, **Skjeseth**.

Illaenurus eurekensis Walcott referred to *Symphysurina* p. 430, **Kobayashi** (1).

Illaenus aduncus Jaanusson [nom. nud.] p. 115, *I. sarsi* J. p. 116, *I.* sp. p. 127, *I. glabriusculus* J. [nom. nud.], *I.* cf. *wahlenbergi* (Eichw.) p. 128, **Bohlin**.

Illaenus americanus p. 765, **Weiss**.

Illaenus cf. *giganteus* Burm. showing part of presumed intestine p. 16 text-figs. 4a-b (photographs), c (drawing), **Péneau** (2).

Illaenus lacertus [spelt *lacterus* on pl. expl.] sp. n. p. 136 pl. lxi figs. 1-6 Ordovician (? Upper) Canada (Baffin I.), *I. baffinlandicus* Roy 1941 lectotype selected and figured pl. lxii figs. 19, 23, *I. b. R. partim* (cranidium) referred to *I. l.* p. 138; *I.*

milleri Billings 1859 type of *Bumastus* (*Bumastoides*) subgen. n. p. 138, *I. punctatus* R. 1941 referred tentatively to *Thaleops* p. 140; *I.* sp. ind. Roy 1941 including *I.* cf. *groenlandicus* of R. 1941 listed p. 121, **Whittington** Mem. geol. Soc. Amer. No. 62 1954.

Illaenus panderi Barr. p. 3, *I.* sp. p. 4, *I.* cf. *wahlenbergianus* B. p. 9, **Röhlich & Chlupáč**.

Illaenus sphaericus Holm p. 237, **Martna**.

Illaenus aff. *sulcifrons* Holm p. 11 ff. referred to *I. planifrons* n. sp. [nom. nud.] p. 34 postscript, *I.* n. sp. [undescribed] p. 16, *I. excellens* H. p. 17, *I.* cf. *wahlenbergi* (Eichw.) with synonym *I. revaliensis* H. p. 31, **JAANUSSON** in **Jaanusson & Mutvei**.

Illaenus wahlenbergianus and cf. w. (Barr.) p. 237, **Marek** (1).

Illaenus sp. p. 36, **Baillie**.

Illaenus sp. p. 36, **Dupuis**.

Illaenus? sp. p. 30 pl. iv fig. 97, **Sdzuy**.

Illaenus (s.l.) ind. sp. for *I.* cf. *balclatchiensis* of Elles 1922 (p. 145) p. 422 pl. xl figs. 98-99, 103-105, 108, **Whittington** (2).

Illaenus n. sp. a [undescribed] p. 19, **Hintze** (1).

Illaenus-like n. gen. n. sp. a [undescribed] p. 17, **Hintze** (1).

Incaia gen. n. [Trinucleidae] p. 32 for type "*Trinucleus*" *nordenskiöldi* Bulman 1931 Ordovician (Middle) Peru, **Whittard** Palaeontogr. Soc. [Monogr.] 109 1955.

Inglefieldia Poulsen 1927 discussed p. 5, **Rasetti**.

Iranaspis King 1937 referred tentatively to Ptychaspidae p. 177, **Hupé** (4).

Iranella gen. n. [nondescribed. 1953] [Parasolenopleuridae] p. 97 for type *Saratogia latefrons* King 1937 text-fig. 102 (5) Cambrian (Upper) Iran, **Hupé** Ann. Paléont. 41 1955.

Irania King 1937 non de Filippi 1863 renamed *Iranoleesia* nom. n. p. 86, **King**.

Iranoleesia gen. n. (nom. n. for *Irania* King 1937 non de Filippi 1863) p. 86, King Geol. Mag. 92 1 1955.

Isidreana gen. n. [related to Phacopidae], *I. tellecheai* sp. n. p. 4 [unillustr.] Ordovician Argentina (Mendoza), Rusconi Bol. paleont. B. Aires No. 30 1954.

Isidreana Rusconi referred to Phacopidae, *I. tellecheai* Rusc. illustrated p. 57 pl. iv fig. 7, Rusconi (5).

Isidrella gen. n. [related to *Parabolinella*], *I. bispinata* sp. n. p. 1 [unillustr.] Cambrian (Middle) Argentina (Mendoza), Rusconi Bol. paleont. B. Aires No. 31 1955.

Isidrella Rusconi 1955 referred to Olenidae p. 15, *I. bispinata* Rusc. illustrated p. 15 pl. ii fig. 1, Rusconi (5).

Isocolidae Angelin 1854 referred to Solenopleuroidea, and taken to include *Isocolus*, *Cyphoniscus* and tentatively *Pradesia* p. 128, Hupé (4).

Isoteloides ? p. 363, Cloud & Barnes.

Isoteloides n. sp. a [undeser.] p. 16, I. ? n. sp. b [undeser.] p. 17, Hintze (1).

Isotelus ? *granulatus* Troedsson p. 154, Wilson in Fortier.

Isotelus sp. p. 690, Clark & Strachan.

Isotelus sp. p. 761, Weiss.

Isotelus sp. ind. p. 143, Whittington (1).

Isotelus recorded p. 1436, Evitt.

Ithyophoridae [recte Ityophoridae] referred to Trinucleoidae p. 260, Hupé (4).

Jakutus gen. n. [Corynexochidae] for type *Dorypyge quadriceps* (Rjonnitzky) p. 105 pl. xv figs. 1, 1a-l, *Jakutus* ? sp. [on pl. expl. as Gen. et sp. indet. (*J.* ? sp.)] p. 107 pl. xiv figs. 5-8 Cambrian (Lower) U.S.S.R. (Yakutsk), Lermontova Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Jeffersonia Cullison [recte Ulrich] referred to Hystriacuridae p. 122, Hupé (4).

Jeffersonia vertical range pl. xiv, J. cf. *J. missouriensis* Cullison pl. xlii fig. 19, *J. granosa* C. pl. xlii fig. 20, *J.* sp. pl. xlii fig. 21, J. cf. *J. producta* C. pl. xlii figs. 22-23, Cloud & Barnes.

Jeffersonia ? sp. A [undeser.] p. 15, Hintze (1).

Judaiella gen. n. [Corynexochidae] for type *J. vermicula* sp. n. p. 99 pl. xiv figs. 1, 1a Cambrian (Lower) U.S.S.R. (Yakutsk), Lermontova Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Judomia gen. n. [Olenellidae] for type *J. dzevanovskii* sp. n. p. 48 pl. v figs. 2, 2 a-e Cambrian (Lower) U.S.S.R. (Siberia), Lermontova Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Judomia see *Yudomia*.

Jujuyaspis Kobayashi 1936 discussed, *J. keideli* K. proparian condition reaffirmed, *J. harringtoni* sp. n. for *J. keideli* Harrington & Leanza 1952 non Kobayashi suture considered gonatoparian p. 467, *Salteraspis* [recte *Saltsaspis*] H. & L. 1952 a synonym of *Jujuyaspis*, *J. borealis* sp. n. Ordovician (Lower) Canada (B.C.) p. 467 pl. vii figs. 12, 13a-b; *J.* ? *robusta* Tjernvik 1953 compared with *Acerocare* p. 467, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Jujuyaspis ? *robusta* Tjernvik 1953 type of *Nericiaspis* gen. n. p. 210, Tjernvik.

Kainella kindlei sp. n. Ordovician (Lower) Canada (B.C.) p. 413 pl. ii fig. 1, *K. stenorachis* Kobayashi listed p. 366, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Kainellidae Ulrich & Resser 1930 a synonym of Richardsonellidae [quod vide], Kobayashi's 1953 subfamilies criticized p. 25, Szalay.

Kawina n. sp. a [undeser.] p. 17, Hintze (1).

Kayseraspis Harrington 1938 discussed & referred to Ogygiocarinae p. 442, *K.* ? *eulides* (Walcott) for *Xenostegium* e. W. 1925 with synonym *X. albertensis* W. p. 442 pl. iv figs. 4-12, pl. v figs. 8-10, ?22-23 [cfr. *eulides*], *K.* ? sp. p. 444 pl. iv figs. 13-14, Kobayashi (1).

Kettneraspis see *Acanthaloma*.

Kingaspis alatus p. 972, **Hupé** (3).

Kingstonia Walcott 1924 — Shaw's division into *K. (Kingstonia)* & *K. (Ucebia)* accepted, *K. (U.) pontotocensis* Lochman with synonym *K. texana* L. p. 725 pl. lxxx figs. 1-4, **Palmer** (1).

Kingstonia gibbosa sp. n. p. 14 pl. iv figs. 1, 1a, 2, 3 Cambrian (Upper) U.S.S.R. (Kazakhstan), **Lermontova** Upper Cambrian trilobites and brachiopods from Boshche-Kulya, 1951.

Kirkella cfr. *vigilans* (Whittington) p. 445 pl. v figs. 12-17, pl. viii fig. 6, **Kobayashi** (1).

Kirkella n. spp. a, b, f [undescri.] pp. 15-16, **Hintze** (1).

Kloučekia phillipsi (Barr.) p. 237, **Marek** (1).

Kloučekia solitaria (Barr.) p. 6 ff., **Röhlich & Chlupáč**.

Kobayashia Harrington 1938 discussed & referred to Ogygiocarinae p. 440, *K. lanceolata* sp. n. Ordovician (Lower) Canada (B.C.) p. 441 pl. iv figs. 1-3, cranidium of *Macropyge gladiator* [Ross] probably belongs to *K.* p. 440, **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Kochiella Poulsen 1927 discussed p. 5, **Rasetti**.

Kogenium Kobayashi 1935 a subgenus of *Proceratopyge* p. 67, **Kobayashi & Ichikawa**.

Kogenium ? sp. p. 42, **Endo** (1).

Kolihapeltis see *Scutellum*.

Komaspidae Kobayashi discussed and referred to Paradoxida ord. n. p. 94, **Lermontova** (1).

Kootenia Walcott 1888 discussed p. 122, *K. jakutensis* Lerm. [sp. n.] for *K. (Bonnia?) j.* L. 1940 nom. nud. p. 124 pl. xvii figs. 2, 2a-f, *K. magna* sp. n. p. 126 pl. xviii figs. 1, 1a-b, *K. anabarensis* sp. n. p. 128 pl. xviii figs. 2, 2a, *K. solitaria* sp. n. p. 131 pl. xviii fig. 4, *K.* sp. indet. (? *K. a.*) p. 130 pl. xviii figs. 3, 3a Cambrian (Lower) U.S.S.R. (Siberia),

K. grandis sp. nov. [nom. nud.] p. 62, **Lermontova** Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Kootenia incerta Rusc. p. 8, **Rusconi** (5).

Kootenia marcovi (Whitfield) 1884 holotype figured pp. 786, 804 pl. lxxiv figs. 1-4, **Shaw** (2).

Kootenia cf. *K. marcovi* (Whitfield) listed p. 3, **Rasetti**.

Koptura lisani (Walcott) p. 110, **Endo** (2).

Kormagnostus Resser 1938 referred to Peronopsinae, *K. simplex* R. with synonyms *K. harlanensis* R. *K. esterius* Lochman & *K. splendens* L. pl. lxxvi figs. 8-12, *Baltagnostus beltensis* L. is congeneric if not conspecific with *K. simplex* p. 718, **Palmer** (1).

Kormagnostus cuchillensis Rusc. p. 30, *K. lanceolatus* R. p. 9, **Rusconi** (5).

Kotuia Kobayashi 1943 referred with query to Anomocarellidae p. 100, **Hupé** (4).

Labiostria gen. n. [Ptychopariidae] p. 750 for type *L. conveximarginata* sp. n. pl. lxxxvi figs. 1-4, *L. platifrons* sp. n. pl. lxxxvi figs. 6-8, *L. sigmoidalis* sp. n. pl. lxxxvi fig. 5 Cambrian (Upper) U.S.A. (Texas) p. 751; *L. quadrata* (Resser) for *Aphelaspis q.* R. [quod vide] p. 750, **Palmer** J. Paleont. 28 6 1955.

Lachnostoma Ross 1951 referred to Bathyruridae, *L.?* sp. p. 449 pl. v fig. 11, **Kobayashi** (1).

Lauzonella Rasetti [misspelt *Kasetti*] 1944 referred to Richardsonellidae p. 150, **Hupé** (4).

Lecanopleura Raymond 1937 referred to Asaphiscidae (Lecanopleurinae) subfam. n. p. 137, **Hupé** (4).

Lecanopleurinae subfam. n. [Asaphiscidae] for *Lecanopleura*, *Greylockia* and *Platydiamesus* p. 137, **Hupé** Ann. Paléont. 41 1955.

Leiagnostus Jaekel 1909 discussed [see also *Phalacroma*], *Grandagnostus* Howell 1935 a synonym, *L. franconicus* sp. n. p. 15 pl. ii figs. 46-47,

? 48, ? 98, text-fig. 9, *L.* cf. *f.* pl. ii fig. 45 Ordovician (Tremadoc) Germany (Hof), **Sdzuy** Abh. senckenb. naturf. Ges. No. 492 1955.

Leiagnostus Jaekel 1909—*Battus nudus* Beyrich [quod vide] cannot be referred p. 925, **Howell** (2).

Leiagnostus cf. *bohemicus* (Novák) p. 12 pl. i fig. 14, **Whittard**.

Leimitzia subgen. n. see *Pteroccephalina*.

Leiostegiidae see Ordosiinae subfam. n.

Leiostegiinae — *Lisania* referred p. 161, **Hupé** (4).

Leiostegium (*Evansaspis*) subgen. n. p. 420 for type *L. (E.) glabrum* sp. n. Ordovician (Lower) Canada (B.C.) p. 421 pl. ii figs. 11–17, *L. formosa* Hintze and tentatively *Crepicephalus ceratopygoides* Raymond also referred to *L. (E.)* p. 421, **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Leiostegium n. sp. a [undescr.] p. 14, **Hintze** (1).

Leiostegium [form with affinities to] p. 144, **Cloud & Barnes**.

Leiostrototropis Raymond 1937 referred to Protopliomeropsinae p. 245, **Hupé** (4).

Leonaspis sp. listed p. 112, **Lawson**.

Leonaspis ? recorded p. 1436, **Evitt**.

Lepidoproetus see *Proetus*.

Lepidoproetus Erben 1951 an independent genus of Proetinae p. 181, **Hupé** (4).

Leptopilus Raymond 1924 referred to Styginidae p. 12, **Skjeseth**.

Leptoplastinae see *Sphaerophthalma* gen. n.

Levinia simplex sp. n. p. 3 [unillustr.] Cambrian (Middle) Argentina (Mendoza), **Rusconi** Bol. paleont. B. Aires No. 32 1955.

? *Levinia simplex* Rusc. illustrated p. 20 pl. i fig. 9, *L. isidrensis* R. p. 8, **Rusconi** (5).

Lichakephalus gen. n. [? Lichidae] for type *L. erbeni* sp. n. p. 28 pl. v figs. 29–33 text-figs. 26a–c Ordovician (Tremadoc) Germany (Hof), **Sdzuy** Abh. senckenb. naturf. Ges. No. 492 1955.

Lichapyge cf. *primula* (Barrande 1868) p. 26 pl. v fig. 28 text-fig. 25, **Sdzuy**.

Lichas coelorrhin Ang. p. 127, **Bohlin**.

Lichas laxatus of Elles 1922 (p. 145) referred to *Platylichas* ind. sp. p. 424, **Whittington** (2).

Lichas (*Acanthopyge*) cf. *meridionalis* (Frech) [after record of J. Péneau] p. 17, **Pillet** (2).

Lichas simplex (Barr.) p. 2, **Růžička & Bouška**.

Lichas sp. p. 76, **Krömmelbein et al.**

Lichengia see *Linchangia*.

Lichidae — *Lichakephalus* gen. n. tentatively assigned p. 28, **Sdzuy**.

Licnocephala Ross 1951 referred to Bathyruridae, *L. longa* sp. n. Ordovician (Lower) Canada (B.C.) p. 448 pl. vi fig. 16, pl. viii fig. 13, **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Linchangia Kobayashi 1942 [error pro *Lichengia* K. 1942] referred to Saukiinae p. 176, **Hupé** (4).

Linguaphillipsia Stubblefield 1948 referred to Phillipsiinae p. 410, **Přibyl**.

Lingukainella Kobayashi 1953—*Metopolichas* ? *martelli* may belong to *L.* p. 412; *L. robusta* Kobayashi listed p. 366, **Kobayashi** (1).

Lioparia Lorenz 1906 referred to Anomocarinae p. 37, **Sdzuy**.

Liostracina krausei Monke p. 110, **Endo** (2).

Liostracina krausei Monke p. 426, **Lu**.

Liostracina ? *paupiforme* sp. n. p. 78 pl. iv fig. 17 Cambrian (Middle) Manchuria, *L. krausei* Monke p. 44, *L. ? pustulosa* n. sp. [nom. nud.] p. 32, **Endo** Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Lisania Walcott 1911 referred to Leiostriginae p. 161, **Hupé** (4).

Litagnostus Rasetti 1944 discussed and referred to Pseudagnostinae pp. 87, 92, *L. expansus* sp. n. Cambrian (Upper) U.S.A. (Nevada) p. 92 pl. xix fig. 13, **Palmer** J. Paleont. 29 1 1955.

Litocodia Resser 1938 should provisionally be restricted to the type *L. typicalis* R. p. 6, **Rasetti**.

Llanoaspididae see *Arcuolimbus* gen. n.

Llanoaspis Lochman 1938 not a synonym of *Genevieveella* L. 1936 p. 736, *L. modesta* L. (holotype refigured) with following Resser 1938 spp. of *G.* as synonyms *campbelli*, *walcotti*, *blandensis*, *marionensis*, *wallacensis*, *buttsi* p. 737 pl. lxxxii figs. 10, 11, *L. peculiaris* (R.) for *G. p.* Resser p. 737 pl. lxxxii fig. 5, *L. undulata* L. with synonyms *L. montanensis* L. and *G. rogersvillensis* R. p. 738 pl. lxxxii figs. 6-7, *L. undulata* var. *granulata* var. n. Cambrian (Upper) U.S.A. (Texas) p. 738 pl. lxxxii fig. 9, *L. virginica* (R.) for *G. v.* Resser p. 738 pl. lxxxii fig. 8; *L. dorothea* L. 1944 a synonym of *L. clinchensis* (R.) p. 738, **Palmer** J. Paleont. 28 6 1955.

Lobocephalina emmrichi (Barr.) p. 186 ff., **Havlicek & Šnajdr**.

Lobopyge branikensis (Barr.) p. 154, *L. ?* sp. p. 120, **Chlupáč** (2).

? *Loganellus incisus* sp. n. p. 2 [unillustr.] Cambrian (Upper) Argentina (Mendoza), **Rusconi** Bol. paleont. B. Aires No. 32 1955.

Loganellus paramillanus sp. n. p. 2 [unillustr.] Cambrian (? Middle), *L. simplicicostatus* sp. n. p. 2 [unillustr.], *L. ornatus* sp. n. p. 3 [unillustr.] Cambrian (Upper) Argentina (Mendoza), **Rusconi** Bol. paleont. B. Aires No. 31 1955.

? *Loganellus paramillanus* Rusc. illustrated p. 16 pl. ii fig. 3, *L. simplicicostatus* R. p. 32 pl. ii fig. 11, ? *L. ornatus* R. p. 33 pl. ii fig. 12, ? *L. incisus* R. p. 33 pl. iii fig. 9, **Rusconi** (5).

Loganopeltidae Hupé 1953 referred to Harpoidae p. 254, **Hupé** (4).

Loganopeltis depressa Rasetti text-fig. 237, **Hupé** (4).

Lonchocephalus Owen 1852 discussed with diagnosis p. 761, *L. ?* sp. p. 762 pl. lxxxvii fig. 5, *L. appalachia* Walcott referred to *Bonneterrina* [quod vide] p. 726, **Palmer** (1).

Lonchodomas Angelin 1854 referred to Raphiophorinae p. 261, **Hupé** (4).

Lonchodomas — *Ampyx domatus* tentatively referred p. 17, **Whittard**.

Lonchodomas portlocki (Barr.) p. 9, **Röhlich & Chlupáč**.

Lonchodomas roualti [sic] (Barr.) so referred p. 320, **Horný**.

Lopnorites Troedsson 1937 considered a subgenus of *Proceratopyge* [quod vide], *L. fragilis* T. referred to *P. (Proceratopyge)* p. 68 text-fig., **Kobayashi & Ichikawa**.

Lorenzella lilia sp. n. p. 72 pl. ix figs. 7-9 Cambrian (Upper) Manchuria, *L. ogurai* Resser & Endo p. 19, *L. rotundata* R. & E. p. 10, *L. ? taitzuensis* E. p. 42, **Endo** Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Lorenzella ogurai Resser & Endo p. 109, **Endo** (2).

Lorenzella sp. p. 426 ff., **Lu**.

Lotagnostus Whitehouse 1936 referred to Geragnostinae pp. 87, 91, *L. obscurus* sp. n. Cambrian (Upper) U.S.A. (Nevada) p. 92 pl. xix figs. 5-7, 10, *L. o. ?* p. 100, **Palmer** J. Paleont. 29 1 1955.

Lunacrania gen. n. [Shumardiidae] for type *L. trisecta* sp. n. Ordovician (Lower) Canada (B.C.) p. 472 pl. vii fig. 8, pl. ix fig. 10 (drawing), *Hardyia metion* ? of Kindle 1929 may belong to *L.*, **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Luxella gen. n. [Ptychopariidae (Antagminae)] p. 20 for type *Ptychoparia lux* Walcott 1917 p. 21 pl. i fig. 4 (drawing), pl. vi figs. 9-11 Canada (British Columbia), *L. crassimarginata* sp. n. p. 22 pl. vi figs. 7-8 Canada (Quebec) [in boulders] Cambrian (Lower), **Rasetti** Smithsonian. misc. Coll. 128 7 1955.

Macrobole see *Cyrtosymbole*.

Macroculites gen. n. [? Emmerichellidae sic] p. 460 for type *M. enigmaticus* [enigmaticum on pl. expl.] sp. n. p. 461 pl. vi fig. 14, pl. ix figs. 6a-b (restored drawings), *M. ?* sp. pl. vi figs. 15 a-b Ordovician (Lower) Canada (B.C.), Kobayashi J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Macropyge gladiator Ross type of *Gladiatoria* gen. n. p. 201, Hupé (4).

Macropyge gladiator Ross—cranium probably belongs to *Kobayashia* p. 440, Kobayashi (1).

Macropyge sica sp. n. p. 26 pl. v figs. 26-27 text-figs. 24a-c Ordovician (Tremadoc) Germany (Hof), Szűz Abh. senckenb. naturf. Ges. No. 492 1955.

Macropygidae Kobayashi 1937 discussed and considered provisionally a separate family for *Macropyge* & *Lichapyge* p. 26, Szűz.

Macropyginae (Kobayashi 1937) referred to Asaphidae p. 201, see *Gladiatoria* gen. n., Hupé (4).

Maladioidella elongata sp. n. p. 84 pl. viii fig. 12 Cambrian (Upper) Manchuria, Endo Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Maladioidella splendens Endo p. 109, Endo (2).

Maladioides asiaticus Kobayashi p. 9, Endo (1).

Maladioides asiaticus Kobayashi p. 109, Endo (2).

Manchuriella Resser & Endo 1937 [so dated]—*Psilaspis* R. & E. a synonym p. 88, *M. semicirculare* sp. n. p. 87 pl. iv figs. 3-5, *M. granulosa* sp. n. p. 89 pl. iv figs. 6-7 Cambrian (Middle) Manchuria, *M. ? tumida* R. & E. pygidia and free cheeks ascribed p. 88 pl. iii figs. 16-20, pl. iv figs. 1-2, *M. mina* (Dames) with following R. & E. 1937 spp. of *M.* as synonyms *typa*, *tapingensis*, *distincta*, *hatai* p. 86, *M. subquadrata* (D.) with synonym *Anomocarella macar* Walcott p. 87, *M. temenus* (Walcott) for *A. t.* W. with synonym *Psilaspis manchuriensis* R. & E. [type of *Psilaspis*] p. 87, *M. convexa*

(Endo) for *P. ? c.* E. 1937, *M. sp.* undt. for *Proasaphiscus ephori* of R. & E. 1937 *partim* (pl. 39 fig. 11) p. 88; *M. prisca* Resser & Endo a synonym of *Ptychoparia orientalis* R. & E. p. 73, *M. angustilimbata* R. & E. of *P. ? grabau* R. & E. p. 74; *M. sp.* listed with *M. cfr. distincta* R. & E. p. 39, *M. tenuilabrosa* E. p. 43, Endo Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Manchuriella convexa (Endo), *M. granulosa* E. p. 110, Endo (2).

Manchurocephalus gen. n. (Dikelocephalidae [Dikelocephalinae]) p. 95 for type *Coosia deprati* Mansuy 1915 [recorded from Manchuria] p. 96 pl. x fig. 12 *pars* Cambrian (Upper), Endo Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Manchurocephalus departi (Mansui) [sic] p. 109, Endo (2).

Mansuyella concavolimbata [con-cavolimbata on pl. expl.] sp. n. p. 92 pl. viii figs. 13-14 Cambrian (Upper) Manchuria, *M. lilii* Endo p. 9, *M. tokunagai* (Kobayashi) p. 25, Endo Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Mansuyella tokunagai (Kobayashi) p. 109, Endo (2).

Maryvillia cf. *M. ariston* Walcott p. 723 pl. lxxix figs. 6-9; *M. hybrida* Resser holotype pygidium an unidentifiable sp. of *Coosella*, cranium referred to *Blountia nixonensis* Lochman p. 722, *M. widnerensis* R. referred to *Coosella* p. 730, Palmer (1).

Megadunderbergia Kobayashi 1939 [sic] not a distinctive subgenus of *Dunderbergia* Walcott 1924 p. 761, Palmer (1).

Megalaspides dalecarlicus (Holm) p. 118, Bohlin.

Megalaspidiella n. spp. a, b [undescribed] p. 15, Hintze (1).

Megalaspis acuticauda Ang. p. 81, *M. sp.* text-fig. 1 (2), Hundt.

Megalaspis gigas Ang. lectotype chosen and figured, Norwegian material excluded p. 135 pl. iv figs. 3, 4, text-fig. 7B, *M. aff. g.* pl. iii fig. 9, *M. centaurus* Dalman declared nomen nudum p. 134, *M. c.* of Bohlin 1949 pl. 1 fig. 1 referred to *M.*

obtusicauda sp. n. Ordovician (Lower) Sweden (Öland) p. 131 pl. iv figs. 1, 2, text-figs. 6A-D, 7A, *M. c.* of Schmidt 1906 referred to *M. longicauda* v. Leuchtenberg (which may be identical with *M. gigas*) p. 136, *M. multiradiata* A. and *M. latilimbata* A. considered nomina dubia p. 134, *M. rudis* A. text-fig. 7C and *M. grandis* Sars discussed pp. 134, 137; *M. cf. r.* p. 114, *M. acuticauda* A. p. 116, *M. hyorrhina* v. Leucht. p. 116 pl. iii fig. 10, *M. limbata* var. *lata* Törnq. and ? *M. l.* var. indet pl. v fig. 1 p. 117, *M. aff. planilimbata* Ang. (=later form of Tjernvik 1952) p. 118, *M. cf. heros* p. 129, *M. sp.* p. 128 pl. iii fig. 8, *M. sp.* text-fig. 7D, Bohlin Bull. geol. Instn Univ. Upsala 35 1955.

Megalaspis gigas Ang. p. 15 ff., *M. obtusicauda* Bohlin p. 30, JAAN-
USSON in Jaanusson & Mutvei.

Megalaspis planilimbata Ang. p. 527 ff., *M. planilimbata* earlier & later forms Tjernvik p. 529, Lindström.

Mendodiscus tuberculatus Rusc. p. 8, Rusconi (5).

Mendogaspis trispinus, *M. quebradensis* Rusc. spp. p. 8, Rusconi (5).

Mendoparabolina brevicauda sp. n. p. 2 [unillustr.] Cambrian (Upper) Argentina (Mendoza), Rusconi Bol. paleont. B. Aires No. 31 1955.

Mendoparabolina brevicauda Rusc. illustrated p. 30 pl. ii figs. 15, ?16 [hypostome tentatively assigned], Rusconi (5).

Meneviella Stubblefield 1951 referred to Conocoryphidae (Meneviellinae) subfam. n. p. 113, Hupé (4).

Meneviellinae subfam. n. [Conocoryphidae] for *Meneviella* p. 113, Hupé Ann. Paléont. 41 1955.

Meromonia sp. p. 742 pl. lxxxiii fig. 8, Palmer (1).

Menomoniidae — *Cruzoia* tentatively referred p. 163, Hupé (4).

Mephiargus see *Acanthopyge*.

Mesonacis Walcott 1885 a synonym of *Olenellus* p. 790, Shaw (2).

Metabowmania gen. n. [Emmerichellidae sic] p. 457 for type *M. latilimbata* sp. n. Ordovician (Lower) Canada (B.C.) p. 458 pl. vi fig. 13, pl. viii fig. 9, pl. ix figs. 7a-b (restored drawings), Kobayashi J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Metacalymene Kegel 1927 emend. Shirley 1936 referred to Colpocoryphinae subfam. n. p. 225, Hupé (4).

Metacalymene baylei (Barr.) p. 579, Bouček & Přibyl.

Metacalymene baylei (Barr.) p. 349, Horný.

Metacalymene baylei (Barr.) p. 211, Svoboda & Prantl (1).

Metacalymene baylei (Barr.) p. 383, Svoboda & Prantl (2).

Metacanthus see *Asteropyge*.

Metagraulos tienshihiuensis sp. n. p. 71 pl. i figs. 2-4 Cambrian (Lower) Manchuria, *M. ? dryas* Walcott p. 71 pl. iii figs. 2-4, Endo Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Metanomocare Lermontova 1940 a synonym of *Coosia* Walcott 1911 p. 169, Hupé (4).

Metapilekia Harrington 1938 referred tentatively to Pilekiidae fam. n., *M. [bilirata]* attribution of pygidium queried p. 43, Sdzuy.

Metapliomerops Kobayashi 1934 referred tentatively to Pilekiidae fam. n. p. 43, Sdzuy.

Meteoraspis Resser 1936 [sic] referred to Crepicephalinae p. 139, Hupé (4).

Meteoraspis Resser 1935 referred to Tricrepicephalidae fam. n., *Coelopachys* & *Greylockia* Raymond 1937 accepted as synonyms, *M. cf. M. loisi* Lochman p. 753 pl. lxxxii fig. 1, *M. metra* (Walcott) with synonym *M. bipunctata* L. p. 753 pl. lxxxii figs. 2, 4, *M. cf. M. robusta* L. p. 754 pl. lxxxii fig. 3; several spp. of *Tricrepicephalus* [quod vide] referred to *Meteoraspis* p. 754, Palmer (1).

Metisia Resser 1937 a subjective synonym of *Modocia* Walcott 1924 p. 763, Palmer (1).

Metopolichas ? *martelli* may belong to *Lingukainella* p. 412, **Kobayashi** (1).

Metoptogyrus Raymond 1937 referred tentatively to *Ogygiocarinae* p. 196n, **Hupé** (4).

Micmacca Matthew 1895 discussed, *M. ? rara* sp. nov. [sic] for *Prokootenia rara* Lermontova 1940 [type of *Prokootenia* L. 1940] refigured p. 87 pl. xii fig. 7, **Lermontova** (1).

Micmaccopsis Lermontova 1940 discussed and referred to *Protolenidae* p. 84, *M. redlichoides* L. restr. (pl. 39 fig. 3 non fig. 3a [given erroneously in one place as pl. 39 fig. 13 non fig. 3]) refigured p. 85 pl. xii fig. 5; *M. redlichoides* L. partim (pl. 39 fig. 3a) referred to *Bergeroniaspis ornatus* sp. n. pl. xii fig. 2a, **Lermontova** (1).

Micragnostus Howell 1935 a synonym of *Geragnostus* p. 14, **Sdzuy**.

Micragraulidae Howell 1937 referred to *Agrauloidea* p. 94, **Hupé** (4).

Miraspis mira (Barr.) p. 320, *M.* sp. (cheek) p. 376, **Horný**.

Modocia Walcott 1924 discussed with new diagnosis, *Metisia* Resser 1937 and *Semnocephalus* R. 1942 subjective synonyms, *M.* cf. *M. centralis* (Whitfield) p. 763 pl. lxxxvii fig. 8, *M.* cf. *M. oweni* (Meek & Hayden) p. 763 pl. lxxxvii figs. 3, 4, 6, **Palmer** (1).

Monstraspis monstrosa (Barr.) p. 388, **Svoboda & Prantl** (2).

Moxonia [sic] referred to *Olenidae* p. 462, **Kobayashi** (1).

Myindidae referred to *Utioidea* p. 135, **Hupé** (4).

Myttonia gen. n. [*Trinucleidae*] for type *M. confusa* sp. n. Ordovician (Lower) Britain (Shropshire) p. 29 pl. iii figs. 5-7, **Whittard** Palaeontogr. Soc. [Monogr.] 109 1955.

Namanoia gen. n. [*Namanoiidae*] for type *N. namanensis* sp. n. [= *Agraulos namanensis* Lerm. 1937 (?MS) nom. nud.] p. 135 pl. xx figs. 1, 1a-j [figs. 1, 1d, 1e forma *lata*,

figs. 1a-b forma *longa* p. 136n] Cambrian (Lower) U.S.S.R., **Lermontova** Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Namanoiidae fam. n. [*Ptychoparida*] for *Namanoia* gen. n. p. 135, **Lermontova** Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Neoagnostus gen. n. [*Aagnostidae*] for type *N. aspidoides* sp. n. Ordovician (Lower) Canada (B.C.) p. 473 pl. vii figs. 4-5, pl. ix fig. 5 (drawing), **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Neocasaphus see *Asaphus*.

Neochilonorria multicostata sp. n. p. 20 pl. i fig. 4 Cambrian (Middle) Argentina (Mendoza), **Ruseoni** Rev. Mus. Hist. nat. Mendoza 8 1-4 1955.

Neogriffithides Toumansky 1935 referred to *Phillipsiinae* p. 410, **Přibyl**.

Neolenus (Matthew) Walcott 1925 discussed with *Olenoides* Meek 1877 partim in synonymy p. 7, *N. inexpectans* Lermontova p. 8 pl. i figs. 6-11, **Lermontova** (2).

Neolenus ? see *Ceraurus* ?

Neophillipsia Gheyselinck 1937 a synonym of *Ditomopyge* Newell 1931 p. 188, **Hupé** (4).

Neoproetus Tesch 1923 referred to *Phillipsiinae* p. 410, **Přibyl**.

Neotaenicephalus gen. n. [*Elviniinae*] p. 451 for type *N. obsoleta* [obsoleta on pl. expl.] sp. n. Ordovician (Lower) Canada (B.C.) p. 452 pl. vi figs. 12a-b, pl. ix figs. 9a-b (drawings), **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Nephranops see *Phacops*.

Nericiaspis gen. n. [*Olenidae* (Pelturinae)] for type *Jujuyaspis* ? *robusta* Tjernvik 1953 [refigured] Cambrian (Upper) Sweden (Nerike) p. 210 pl. ii figs. 1-4 text-fig. 1B, **Tjernvik** Geol. Fören. Stockh. Förh. 77 2 1955.

Nieszkowskia ? n. sp. a [undeser.] p. 19, **Hintze** (1).

Nileidae — *Brachyaspis* Salter 1866 may belong p. 145, **Whittington** (1).

Nileidae ? gen. et sp. indet. p. 425 pl. v figs. 20–21 Ordovician (Lower) Canada (B.C.), **Kobayashi** (1).

Nileus armadillo Dalm. illustration of Panderian organs text-fig. 1B, **Hupé** (1).

Nileus armadillo Dalm. p. 116 ff., **Bohlin**.

Nileus armadillo (Dalm.) p. 523 ff., **Lindström**.

Nileus-like sp. A [undescribed] p. 15, **Hintze** (1).

Nileus-like n. gen. [undescribed] n. spp. a, b, c, d pp. 15–17 [all undescribed], **Hintze** (1).

Niobe emarginula Ang., *N.* sp. (aff. *obsoleta* Linn.) Tjernvik p. 527 ff., **Lindström**.

Niobe frontalis (Dalman) with measurements of lectotype (chosen) p. 143 pl. vi figs. 5–9, text-figs. 9A–B, *N.* cf. *frontalis* pl. vi fig. 10, *N.* sp. (cf. *frontalis* sensu Schmidt 1901) p. 148 text-fig. 9C, *N. imparilimbata* sp. n. Ordovician (Lower) Sweden (Öland) p. 149 pl. vi figs. 11–12 [non 10], *N. laeviceps* D. discussed and some records excluded p. 150, *N.* sp. p. 118, **Bohlin** Bull. geol. Instn Univ. Upsala 35 1955.

Niobe homfrayi var. *smithi* listed p. 5, **Curtis**.

Niobe (*Niobella*) *innotata* (Barrande 1868) neotype with synonyms *Conocephalites extremus*, *C. discrepans*, ? *C. ? problematicus*, *Asaphus wirthi*, ? *Trilobites* spp. V., X. & Z. Barrande 1868 spp. p. 22 pl. iv figs. 1–21 text-figs. 18 (reconstruction), 19, **Sdzuy**.

Niobe ? n. sp. a [undescribed] p. 15, **Hintze** (1).

Niobella see *Niobe*.

Niobella selwyni (Salter) recorded p. 17, **Whittard**.

Norwoodia Walcott 1916—*Whitfieldina* Resser 1937 a synonym, *N. quadrangularis* (Whitfield) p. 743 pl. lxxxiv fig. 1, **Palmer** (1).

Norwoodiidae referred to *Burlingida* p. 411, **Kobayashi** (1).

Norwoodina Lochman 1940 a synonym of *Holcacephalus* Resser 1938 p. 742, **Palmer** (1).

Odontochile cristata Hawle & Corda, *O. rugosa* H. & C., *O. spinifera* (Barr.), *O. fletcheri* (B.), *O. reussi* (B.) p. 388, **Svoboda & Prantl** (2).

Odontochile cristata Hawle & Corda p. 539, **Svoboda & Prantl** (4).

Odontochile rugosa (Hawle & Corda), *O. hausmanni* (Brgt.), *O. auriculata* (Barr.), *O.* cf. *reussi* (B.) p. 155, **Chlupáč** (2).

Odontochile rugosa Hawle & Corda, *O.* cf. *spinosa* (Barr.) p. 221, **Svoboda & Prantl** (1).

Odontopleura dufrénoyi Barr., *O. ovata* Emmrich p. 379, **Horný**.

Odontopleuracea — *Pharostoma* considered not related p. 31, **Sdzuy**.

Odontopleuridae see *Acidaspides* gen. n.

Odontopleuridae gen. indet. for *Acidaspis hystrix* of Elles 1922 (p. 145) p. 425 pl. xl fig. 119, **Whittington** (2).

Ogygia dilatata plautoni Schmidt 1904 referred to *Stygina* p. 14, *O. ? concentrica* Linnarsson 1869 to *Bronteopsis* p. 16, *O. c.* of Funquist 1919 to *B. holtedahli* sp. n. p. 17, **Skjeseth**.

Ogygia guettardi Brogn. p. 81 text-fig. 2, *O.* sp. text-fig. 1 (1), **Hundt**.

Ogygiocarinae — general discussion of American forms *Bellefontia*, *Asaphellus*, *Xenostegium*, *Trigonocerca*, *Trigonocercella*, *Kobayashia*, *Kayseraspis*, *Columbicephalus* gen. n. [quae vide] p. 434 ff., **Kobayashi** (1).

Ogygiocaris panderi Schmidt 1904 referred to *Bronteopsis* p. 19, **Skjeseth**.

? *Ogygopsis isidrensis* Rusc. p. 8, **Rusconi** (5).

Olenellidae see *Judomia* gen. n.

Olenellidae discussed p. 44, **Lermontova** (1).

Olenellidae (undetermined) listed p. 3, **Rasetti**.

Olenellus Billings 1861 discussed and *Mesonacis* Walcott 1885 & *Paedeumias* W. 1910 considered synonyms, *O. brachycephalus* (Emmons) 1860 [type lost] with synonyms *P. transitans* W. 1910 & *P. perkinsi* Resser & Howell 1938 p. 791 pl. lxxv figs. 1-3, *O. thompsoni* (Hall) 1859 [type missing] with synonyms var. *crassimarginatus* W. 1910 & *O. agellus* R. & H. p. 792 [following records of *O. t.* referred to *O. b.*—Whitfield 1884, Raymond 1928, Bell 1931 *partim*, Kindle & Tasch 1948 *partim*], *O. vermontanus* (H.) 1859 [type missing] with synonym *O. georgiensis* R. & H. and excluding *O. v. K. & T.* 1948 [to *O. b.*] p. 793 pl. lxxv fig. 10, *O. hermani* K. & T. 1948 p. 792, **Shaw** (2).

Olenellus recorded from Spain, p. 15, *O. bröggeri*? Walcott, *O. ? thompsoni*?, *O. vermontana*? p. 19, **Sampelayo**.

Olenellus cf. *thompsoni* Hall 1859 p. 18 pl. ii fig. 10 (partly restored), *O. sp. I* p. 18 pl. ii fig. 5, *O. sp. II* p. 19 pl. ii figs. 6-7 text-fig. 4 (reconstruction) Cambrian (Lower) Spitzbergen, **Winsnes**.

Olenid? see *Highgatella* gen. n.

Olenidae Burmeister 1843—*Tos-tonia* and *Moxomia* referred p. 462, Triarthrinae included in Oleninae, **Kobayashi** (1).

Olenidae — *Isidrella* Rusconi 1955 referred p. 15, *Orkekeia* R. 1955 tentatively referred p. 17, **Rusconi** (5).

Olenidae incertae subfamiliae—*Euloma*, *Highgatella*, *Pareuloma* & ? *Proaulacopleura* so referred, probably constituting a new subfamily p. 19, **Sdzuy**.

Olenidae (Oleninae) see *Parao-lenus* gen. n.

Olenidae (Oleninae) see *Proto-hedinia* gen. n.

Olenidae (Triarthrinae) see *Cyclog-nathina* gen. n.

Oleninae — Triarthrinae emend. Harrington & Leanza a synonym p. 462, **Kobayashi** (1).

Olenoidae — Sárkiaidae referred p. 150, **Hupé** (4).

Olenoides Meek 1877 *partim* in synonymy of *Neolenus* Matthew 1899 p. 7, **Lermontova** (2).

Olenoides chañariensis sp. n. p. 4 [unillustr.] Cambrian (Middle) Argentina (Mendoza), **Rusconi** Bol. paleont. B. Aires No. 32 1955.

Olenoides chañariensis Rusc. illustrated p. 22 pl. i fig. 8, **Rusconi** (5).

Olenoides manchuriensis sp. n. Cambrian (Middle) Manchuria p. 62 pl. iv figs. 8-9, **Endo** Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Olenus frequens Barrande 1868 with synonyms *O. gümbeli* & *O. expectans* B. referred to *Parabolina* [quod vide] p. 15, **Sdzuy**.

Olenus multicostatus, *O. triangulatus*, ? *O. tellecheai* Rusc. spp. p. 8, **Rusconi** (5).

Onchocephalus Resser 1937 discussed pp. 6, 16, *O. sulcatus* sp. n. p. 17 pl. i fig. 3 (drawing), pl. iii figs. 16-19, *O. sp. undet.* No. 1 p. 17 pl. iii fig. 20, *O. sp. undet.* No. 2 p. 18 pl. iii fig. 22, *O. sp. undet.* No. 3 p. 18 pl. iii fig. 21 Cambrian (Lower) Canada (Quebec) [in boulders]; *Antagnus solitarius* Lochman & *Proliostracus goodwini* Resser referred to *O. p.* 17, **Rasetti** Smithsonian. misc. Coll. 128 7 1955.

Onchopeltis curcunchensis sp. n., ? *O. platycephalus* sp. n. p. 3 [unillustr.] Cambrian (Upper) Argentina (Mendoza), **Rusconi** Bol. paleont. B. Aires No. 31 1955.

Onchopeltis curcunchensis Rusc. illustrated p. 34 pl. iii fig. 5, ? *O. platycephalus* R. p. 35, **Rusconi** (5).

Onnia sp. p. 10, ? *O. sp.* p. 51 from Argentina, **Rusconi** (5).

Ordosia gen. n. [Leiostegiidae (Ordosiinae)] p. 421 (435) for type *O. fimbriacauda* sp. n. p. 422 (436) pl. i figs. 12-18 Cambrian (Upper) China (Inner Mongolia), **Lu** Acta paleont. sinica 2 4 1954.

Ordosiinae subfam. n. [Leiostegiidae] for *Ordosia* gen. n. p. 421 (435), **Lu** Acta palaeont. sinica 2 4 1954.

Orkekeia gen. n. [no family assigned], *O. ornata* sp. n. p. 1 [unillustr.] Cambrian (? Middle) Argentina (Mendoza), **Rusconi** Bol. paleont. B. Aires No. 31 1955.

Orkekeia **Rusconi** 1955 referred with query to Olenidae, *O. ornata* **Rusc.** illustrated p. 17 pl. ii fig. 4, **Rusconi** (5).

Ormatops [sic] *atavus* (Barr.) p. 211 ff., *O. sp.* p. 213, **Havlíček & Šnajdr**.

Orometopidae fam. n. [Trinucleoidae] p. 261 for *Orometopus*, **Hupé** Ann. Paléont. 41 1955.

Orometopus **Brögger** 1896 referred to Orometopidae fam. n. p. 261, **Hupé** (4).

? *Orria solitaria* **Rusc.** p. 8, **Rusconi** (5).

Oryctocephalidae see *Aguaraya* gen. n.

Oryctocephalidae **Beecher** discussed, *Neolenus* & *Dorypyge* referred p. 6, **Lermontova** (2).

Oryctocephalidae — *Huilichia* **Rusconi** 1955 referred p. 22, **Rusconi** (5).

Otarion convexum, *O. cornigerum*, *O. barrandei* (H. & C. spp.) listed p. 154, **Chlupáč** (2).

Otarion diffractum **Zenker** p. 383, *O. d. nováki* **Bouček** p. 385, *O. barrandei* b. (Hawle & Corda) p. 388, *O. advenum* **Prantl & Přibyl** p. 388, **Svoboda & Prantl** (2).

Otarion diffractum diffractum **Zenker** p. 525, *O. convexum* (Hawle & Corda) p. 533, *O. barrandei* (H. & C.) p. 540, *O. (Coignouvina) coronata* (Barr.) p. 541, **Svoboda & Prantl** (4).

Otarion (Otarion) diffractum diffractum **Zenk.** p. 580, **Bouček & Přibyl**.

Otarion (O.) diffractum **Zenker** and *d. diffractum* p. 323 ff., *O. (O.) n. sp.* [ex gr. *O. (O.) d.*] [undeser.] p. 360, *O. ? humillimum* (Barr.) p. 385, *O. sp.* (nov. ?) [undeser.] p. 381, *O. sp. indet.* p. 328, **Horný**.

Otarion diffractum nováki **Bouček**, *O. schrieli* **Keg.**, *O. advenum* aff. senior **Ptl & Přib.**, *O. sp.* p. 315, **Chlupáč** (1).

Otarion (Otarion) gaultieri (Rouault) [after record of **J. Péneau**] p. 17, *O. sp.* [compared with *O. chauffouri* **Pillet**, *O. advenum a. Přibyl* and *O. diffractum nováki* **Bouček**] p. 19n, *O. (O.) barrandei* (Corda), *O. (O.) chauffouri* (Pillet), *O. (O.) cf. g.* p. 20, **Pillet** (2).

Otarion sp. p. 76, **Krömmelbein et al.**

Paedeumias **Walcott** 1910 discussed p. 46, *P. sp.* p. 47 pl. v figs. 1, 1a Cambrian (Lower) U.S.S.R. (Siberia), **Lermontova** (1).

Paedeumias **Walcott** 1910 a subjective synonym of *Olenellus* p. 790, *P. transitans* **W.** 1910 & *P. perkinsi* **Resser & Howell** 1938 synonyms of *O. brachycephalus* (Emmons), *P. t. W.* 1910 *partim* (pl. 24 fig. 12, pl. 33 fig. 1, pl. 44 fig. 7) referred to *O. thompsoni* (Hall) p. 793, **Shaw** (2).

Paedeumias sp. table 1, **Zelenov, Zhuravleva & Korde**.

Paenebeltella **Ross** 1951 referred to Pelturinae, *P. convexa sp. n.* Ordovician (Lower) Canada (B.C.) p. 468 pl. vii figs. 21a-b, pl. viii fig. 12, **Kobayashi J. Fac. Sci. Tokyo Univ.** [2] 9 1955.

Pagetia **Walcott** 1916 (emend. **Lermontova** 1940) discussed, *P. horrida sp. n.* p. 36 pl. iii fig. 8 Cambrian (Lower) U.S.S.R. (Siberia); *P. annio* **Cobbold** and *P. vigilans* **Matthew** referred to *Triangulaspis* **Lermontova** p. 17, **Lermontova** Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Pagetia sp. p. 17 pl. ii fig. 4, **Winsnes**.

Pagetidae **Kobayashi** 1935 discussed and referred to Dawsonida p. 15, **Lermontova** (1).

Pagetides amplifrons, *P. elegans*, *P. leiopygus*, *P. minutus*, *P. rupestris* **Rasetti** spp. listed p. 3, **Rasetti**.

Pagetides parkeri (Walcott) 1886 of which *P. elegans* **Rasetti** 1945 considered a synonym pp. 794, 804 pl. lxxiv fig. 13 *pars*, pl. lxxv figs. 4-9, **Shaw** (2).

Pagetiellus Lermontova 1940 discussed p. 37, *P. lenaicus* (Toll) p. 38 pl. iv figs. 1, 1a-k, *P. tolli* L. refigured p. 42 pl. iv figs. 2, 2a-d, *P. declivis* sp. nov. [nom. nud.] p. 38, Lermontova (1).

Pagetiellus lenaicus (Toll) *P. tolli* Lerm. table 1, Zelenov, Zhuravleva & Korde.

Pagetina rjonsnitzkii Lermontova refigured p. 27 pl. iii figs. 7, 7a-b, *P. primaeva* L. refigured p. 30 pl. iii figs. 5, 5a-c, *P. glabrata* L. refigured p. 33 pl. iii figs. 6, 6a, Lermontova (1).

Pagodia angustilimbata sp. n. p. 63 pl. viii fig. 15, *P. mina* sp. n. p. 63 pl. ix fig. 5 Cambrian (Upper), *P. subquadrata* sp. n. p. 63 pl. iv figs. 10-12 Cambrian (Middle) Manchuria, *P. buda* Resser & Endo p. 3, *P. paraquadrata* Endo p. 9, *P. sp.* p. 8, Endo Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Pagodia divergens Endo, *P. buda* Resser & E. p. 109, Endo (2).

Pagodia sp. p. 429, Lu.

Paishania [recte *Peishania*] *parallela* Endo p. 110, Endo (2).

Paladin Weller 1936 referred to Phillipsiinae, *Weberides* Reed 1942 and probably *Vidria* W. 1944 synonyms p. 409, Přibyl.

Paladin mucronatus p. 1437, Huffman.

Paladin from Nevada pp. 2241, 2247, Dott.

Panarchaeogonus Öpik 1937 see *Protarchaeogonus* gen. n.

Panderia sp. p. 237, Martna.

Papillicalymene Shirley 1936 referred to Calymeninae p. 226, Hupé (4).

Parabolina frequens (Barrande 1868) for *Olenus* f. B. neotype chosen with synonyms *O. gumbeli* & *O. expectans* B. p. 15 pl. iii figs. 58-61, 162, 63-70 text-fig. 10 (reconstruction), Sdzuy.

Parabolinella see *Isidrella* gen. n.

Parabolinella bisulcata sp. n. Ordovician (Lower) Canada (B.C.) p. 463 pl. vii figs. 18-19, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 9 1955.

? *Parabolinella pentacantha* sp. n. p. 1 [unillustr.] Cambrian (Middle) Argentina, Rusconi Bol. paleont. B. Aires No. 31 1955.

? *Parabolinella pentacantha* Rusc. illustrated p. 15 pl. ii fig. 2, Rusconi (5).

Paracedariidae fam. n. (nom. n. for Pilgrimiidae Hupé 1953) p. 131, Hupé Ann. Paléont. 41 1955.

Paracoldinioidia [recte *Parakoldinioidia*] *typicalis* Endo p. 109, Endo (2).

Paracoosiinae Kobayashi 1950 referred to Anomocaridae and enlarged to include *Paracoosia*, *Pterocephalia*, *Glyphaspis*, *Pterocephalina*, and tentatively *Birmanites*, *Tropydopyge* & *Hagiorites* p. 37, Sdzuy.

Paracybeloides gen. n. [Cybelidae] p. 251 for type *Cybele loveni* var. *girvanensis* Reed Ordovician (Upper) Britain (Scotland) text-fig. 236 (1) reconstruction, Hupé Ann. Paléont. 41 1955.

Paradoxida ord. n. for Paradoxidae and Komaspidae p. 94, Lermontova Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Paradoxidae Kobayashi referred to Paradoxida ord. n. p. 94, Lermontova (1).

Paradoxides paradoxissimus p. 107 ff., *P. rugulosus* p. 115, Spjeldnaes.

Paradoxides rugulosus Hawle & Corda, *P. minor*, *P. gracilis* (Boeck), *P. lyelli* Barr., *P. sacheri* Barr. p. 184 ff., Havlíček & Šnajdr.

Paradoxides ? sp. p. 27 pl. ii fig. 12, Lermontova (2).

Paradoxides recorded p. 973, Hupé (3).

? *Paradoxides* p. 81, Hundt.

Paragriffithides Reed 1943 either a synonym of or a subgenus of *Griffithides* Portlock 1843 p. 411, Přibyl.

Parahomalonotus gervillei (de Verneuil) p. 17, Pillet (2).

Parahystricurus ? sp. p. 455 pl. vi fig. 7; *P. carinatus* Ross possible reference of Ross's 1951 Pygidium genus and species undetermined (pl. 19 figs. 6, 11, 15) p. 456, Kobayashi (1).

Parahystericurus n. sp. a [undescr.] p. 15, **Hintze** (1).

Parakoldinioidia see *Paracoldinioidia*.

Parakoldinioidia typicalis Endo p. 7, **Endo** (1).

Paralejulus see *Scutellum*.

Paralejurus see *Scutellum*.

Paramansuyella granulosa Endo, *P. planilimbata* E., *P. glabra* E., *P. puteata* E. p. 109, **Endo** (2).

Paramansuyella puteata Endo, *P. planilimbata* E. p. 8, **Endo** (1).

Paramansuyia planilimbata Endo p. 8, *P. sp.* p. 38, **Endo** (1).

Paramicmacca gen. n. [Protonotidae] for type *P. siberica* sp. n. p. 89 pl. xii figs. 8, 8a-d Cambrian (Lower) U.S.S.R. (Siberia), **Lermontova** Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Paraolenus gen. n. [Olenidae (Oleninae)] for type *P. papilionaceus* sp. n. p. 17 pl. iv figs. 4-9 Cambrian (Upper) U.S.S.R. (Kazakhstan), **Lermontova** Upper Cambrian trilobites and brachiopods from Bosheche-Kulya, 1951.

Parapilekia Kobayashi 1934 discussed & considered a subjective synonym of *Pilekia* Barton 1915 p. 44, **Sdzuy**.

Parapilekia Kobayashi (a sp. near to *P. olenensis* Růžička) recorded from Tremadoc of Morocco p. 1593, **Choubert, Hindermeier & Hupé**.

Paraplethopeltis depressa Bridge & Cloud holotype refigured pl. xxxviii figs. 1-3, 10, *P. obesa* B. & C. types refigured pl. xxxviii figs. 4-9, 11-13, *P. ?* pl. xxxviii fig. 14, **Cloud & Barnes**.

Paraplethopeltis n. spp. a & b [undescr.] p. 13, **Hintze** (1).

Parasolenopleuridae see *Iranella* gen. n.

Paraulacopleura see *Aulacopleura*.

Pareuloma Rasetti 1954 referred with *Euloma* and others to Olenidae incertae subfamiliae p. 19, **Sdzuy**.

Pareuloma Rasetti referred to Eulominae subfam. n. p. 449, **Kobayashi** (1).

Particeps Reed 1943 either a synonym of or a subgenus of *Griffithides* Portlock 1843 p. 411, **Příbýl**.

Peishania see *Paishania*.

Peishania parallela sp. n. p. 66 pl. vi figs. 12-17 Cambrian (Middle) Manchuria, *P. convexa* Resser & Endo p. 33, **Endo** Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Peltura minor Brögger p. 529, **Lindström**.

Peltura pacifica sp. n. p. 465 pl. vii figs. 14-17, *P. canadensis* sp. n. p. 466 pl. vii fig. 20 Ordovician (Lower) Canada (B.C.), **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Pelturinae — *Paenebeltella* Ross 1951 referred p. 468, **Kobayashi** (1).

Pelturinae see *Nericiaspis* gen. n., tentative relationships within subfamily text-fig. 2, **Tjernvik**.

Pemphigaspis inexpectans Lochman p. 764 pl. lxxxix figs. 2, 4, 6, **Palmer** (1).

Pemphigaspis [sic] Hall 1863 referred to Raymondinidae p. 128, **Hupé** (4).

Perimetopus Resser 1937 should be restricted to the type *P. arenosus* (Billings) p. 7, **Rasetti**.

Perimetopus arenosus (Billings) 1861 with synonym *P. secundus* Resser 1937 p. 796, **Shaw** (2).

Periomma Resser 1937 discussed and referred to Antagminae pp. 6, 24, *P. walcotti* R. holotype refigured p. 24 pl. i fig. 6 (drawing), pl. v figs. 9-14, *P. gaspensis* sp. n. Cambrian (Lower) Canada (Quebec) [in boulders] p. 25 pl. iv figs. 11-15, **Rasetti** Smithsonian. misc. Coll. 128 7 1955.

Periomma Resser 1937—*Periomella* R. 1938 considered a synonym p. 796, *P. typicalis* R. 1937 with synonym *Periomella yorkensis* R. 1938 pp. 797, 804 pl. lxxiv fig. 10, **Shaw** (2).

Periomella Resser 1938 referred to *Ptychopariidae* (*Periomellinae*) subfam. n. p. 28, *P. yorkensis* R. 1938 from Quebec p. 29 pl. i figs. 8-9 (drawings), pl. v figs. 1-8, Rasetti.

Periomella Resser 1938 considered a synonym of *Periomma*, since its type *P. yorkensis* R. is considered a synonym of *Periomma typicalis* R. p. 797, Shaw (2).

Periomellinae subfam. n. [*Ptychopariidae*] for *Periomella* Resser 1938 p. 28, Rasetti Smithsonian. misc. Coll. 128 7 1955.

Perischodory grandgei Raymond p. 421 pl. ix fig. 11 (drawing), Kobayashi (1).

Pernoprocetus Toumansky 1935 excluded from *Phillipsiinae* but not reassigned p. 411, Přibyl.

Peronopsinae—*Baltagnostus* Lochman and *Kormagnostus* Resser referred p. 718, Palmer (1).

Peronopsis fallax ferox p. 114, Spjeldnaes.

Peronopsis integer integer (Barr.), *P. integer spinosa* (Pomp.) p. 184 ff., Havlíček & Šnajdr.

Peronopsis munda Raymond 1925 referred to *Geragnostus* p. 475, Kobayashi (1).

Phacopid (resembling *Trimerocephalus*) p. 136, Edgell.

Phacopidae see *Bouleinae* subfam. n.

Phacopidae see *Isidreana* gen. n.

Phacopidella referred to *Dalmanitinae*, *P. (Dienstina)* discussed p. 63, *P. (D.) enkia* sp. n. for *P. sp. aff. limaria* of R. & E. Richter 1926 (pl. 11 fig. 15) Devonian (Upper) Germany (Rhineland) p. 52 pl. i figs. 4a-d, 5b-c, pl. ii fig. 17 (reconstruction), *P. (Ductina)* discussed p. 69, R. & E. Richter Senck. leth. 36 1-2 1955.

Phacopidella (Ductina) ductifrons p. 227 ff., *P. (D.) sp.* p. 241, Rabien.

Phacopidella misera (Barr.) p. 315, Chlupáč (1).

Phacopidella prantli Růžicka, *P. sp.*, *P. (Denckmannites)* [sic] *microma* Röm. p. 224, Svoboda & Prantl (1).

Phacopidella trapeziceps (Barr.) p. 579, Bouček & Přibyl.

Phacopidella trapeziceps (Barr.) p. 326 ff., *P. glockeri* (B.) p. 379, Horný.

Phacopidella trapeziceps (Barr.) p. 526, *P. misera* (B.) p. 531, *P. (Denckmannites) microma* (Röm.) p. 546, Svoboda & Prantl (4).

Phacopinae—relations of Upper Devonian forms p. 56 text-fig. 1, see also *Phacops*, R. & E. Richter (1).

Phacops (*Phacops*) Upper Devonian forms grouped into *breviceps*-group (including only *koeneni*, but *cryphoides* may belong), *granulatus*-group (*granulatus*, *circumspectans*, *wedekindi*, possibly *pentops*), *latifrons*-group (*accipitrinus*, *a. maretiolensis*, *cornelius*) p. 57; *P. (Nephranops)* discussed and derived from *breviceps*-group of *P. (Phacops)* p. 57; *P. (Cryphops)* classified into *cryptophthalmus*-group (*cryptophthalmus* range & distribution discussed, *acuticeps*), *schlosseri*-group (*schlosseri* sp. n. [see below], *pulvinifer*), ? *ensae*-group (*ensae*, *wocklumeriae*, *tripartitus*) [this group may be an independent off-shoot from *P. (Phacops)*] p. 58 ff., *P. (Cryphops) schlosseri* sp. n. Devonian (Upper) Germany (Thüringia) p. 50 pl. i figs. 1a-d, 2, pl. ii fig. 16 (reconstruction), *P. (C.) pulvinifer* (Matern 1927) holotype refigured p. 52 pl. i figs. 3a-d; *P. (Trimerocephalus)* discussed and derived from *cryptophthalmus*-group of *P. (Cryphops)* p. 62, *P. (T.) mastophthalmus* (Reinh. Richter) pl. i figs. 6-8; *P. (Dianops)* discussed and derived from *schlosseri*-group of *P. (Cryphops)*, *P. (D.) limbatus* range and relations with *P. (D.) bartzschii* Pfeiffer discussed p. 62, *P. (D.) sp.* pl. ii fig. 14; relations of U. Devonian subgenera of *Phacops* text-fig. 1, R. & E. Richter Senck. leth. 36 1-2 1955.

Phacops (*P.*) *accipitrinus* *accipitrinus* (Phillips 1841) including *P. (P.) granulatus* of Reed 1944 p. 46, Goldring.

Phacops bronni (Barr.) p. 438, Svoboda & Prantl (3).

Phacops communis fecundus Barr. p. 527, *P. cf. hoeningshausi* [sic] B., *P.*

cf. *becki* (B.) p. 534, *P. sternbergi* B. p. 540, *P. fecundus superstes* B. p. 541, Svoboda & Prantl (4).

Phacops cf. *confluens* R. & E. Richter p. 154 pl. xxi figs. 1-2, *P. fecundus major* Barrande p. 155 pl. xx figs. 22-23, *P. menchikoffi* sp. n. Devonian (Middle) p. 155 pl. xx figs. 15-21, pl. xxi fig. 10, *P. potieri* Bayle p. 156, *P. schlotheimi* Bronn p. 156 pl. xxi figs. 3-5 [Sahara], 6 [Eifel], *P. salteri* Kozłowski [cf. on pl. expl.] p. 157 pl. xxi fig. 9, *P. cf. turco* R. & E. R. p. 157 pl. xxi figs. 7-8 all from Algeria (Sahara), Le Maître Matér. Carte géol. Algér. [1] No. 12 1952.

Phacops cristata var. *pipa* Hall p. 184, Kindle & Eidman.

Phacops cryphoides?, *P.* sp. p. 240, *P.* (subgen.?) sp. p. 242; *P.* (*Phacops*) *koeneni* p. 242, *P.* (*P.*) cf. *koeneni* p. 236; *P.* (*Cryphops*) *cryptophthalmus* horizon discussed p. 188, *P.* (*C.*) *acuticeps* R. & E. R.?, *P.* (*C.*)? p. 227, *P.* (*C.*?) *ensae*, *P.* (*C.*?) *wocklumeriae* p. 229; *P.* (*Dianops*) *griffithides* p. 225, *P.* (*D.*) sp. p. 234, *P.* (*D.*) *anophthalmus* near *griffithides* p. 247; *P.* (*Nephranops*) *incisus dillanui* R. & E. R. p. 227, *P.* (*N.*)? p. 228; *P.* (*Trimercephalus*) sp. p. 228, *P.* (*T.*) *mastophthalmus* p. 231, Rabien.

Phacops downingiae p. 7, Curtis.

Phacops (*P.*) aff. *fecundus* (Barrande), *P.* (*P.*) sp., *P.* (subgen.?) *emarginatus* (B.)? p. 21, Pillet (2).

Phacops (*Phacops*) *fecundus communis* Barr. p. 581, Bouček & Přibyl.

Phacops fecundus communis Barr. p. 353, Horný.

Phacops fecundus communis Barr. p. 383, *P. f. degener* B. p. 388, *P. bronni* B., *P. cf. becki* B. p. 387, *P. sternbergi* B. p. 388, *P.* (*Reedops*) *cephalotes* Hawle & Corda p. 388, Svoboda & Prantl (2).

Phacops fecundus communis Barr. mut. [undescrib.] p. 211, *P. cf. hoeninghausi* B. p. 219, *P. f. degener* B. p. 221, *P. f. superstes* B. p. 223, Svoboda & Prantl (1).

Phacops latifrons (Bronn), *P. laticomes* n. sp. R. & E. Richter [nom. nud.] p. 311, *P.* sp. p. 314, Struve.

Phacops latifrons p. 103, *P.* sp. p. 22 ff., *P.* n. sp. [undescrib.] (related to *P. l.*) p. 83 ff., *P.* n. sp. [undescrib.] p. 111, Krömmelheim et al.

Phacops rana milleri frontispiece, La Roque & Marple.

Phacops sternbergi, *P. signatus* (Hawle & Corda spp.), *P. intermedius*, *P. fecundus major*, *P. emarginatus* Barr. spp., *P.* (*Reedops*) *cephalotes* (H. & C.) p. 155, Chlupáč (2).

Phacops sp. p. 83, Hundt.

Phaetonellus? sp. p. 154, Chlupáč (2).

Phaetonides striatus precedens Bouč. p. 211, Svoboda & Prantl (1).

Phalacroma Corda 1847—smooth forms usually attributed should be referred to *Leiagnostus* p. 15, Sdzuy.

Phalacroma — smooth Ordovician Agnostids should probably not be referred p. 13, Whittard.

Phalacroma Hawle & Corda 1847—considered debatable whether *Battus nudus* Beyrich (= *P. scutiforme* H. & C.) or *Agnostus bibullatus* Barrande should be considered the type species, and thought best to refer *B. nudus* to *Phalagnostus* gen. n. p. 926, Howell (2).

Phalacroma nudum Corda p. 186 ff., Havlíček & Šnajdr.

Phalagnostus gen. n. [Agnostidae] for type *Battus nudus* Beyrich 1845 Cambrian (Middle) Bohemia p. 926, Howell J. Paleont. 29 5 1955.

Pharostoma Corda 1847 discussed & referred to Calymenidae, considered not related to Odontopleuracea p. 31, Sdzuy.

Pharostoma pulchrum (Barr.) p. 3 ff., Röhlich & Chlupáč.

Pharostoma n. sp. [undescrib.] p. 240, Martna.

Pharostom[at]idae Hupé 1953 a synonym of Calymenidae, *Euloma* & *Calymenopsis* being removed p. 30, Sdzuy.

Pharostomina gen. n. [Calymeni-
dae] for type *P. öpiki* sp. n. p. 31
pl. ii fig. 99, pl. vi figs. 62–75 text-figs.
31–32, *P. ferentaria* sp. n. possibly
including *Trilobites* sp. Y. Barrande
1868 p. 33 pl. ii fig. 80, pl. vi figs.
77–79, 81–88 text-figs. 33a–d (recon-
struction), *P. sp.* p. 34 pl. vi fig. 76
Ordovician (Tremadoc) Germany
(Hof); *Pilekia trapezoidalis* Harring-
ton 1938 probably belongs to *Pharo-
stomina* p. 31, *Sdzuy* Abh. senckenb.
naturf. Ges. No. 492 1955.

Phillipsella Oehlert 1886 an objec-
tive synonym of *Phillipsinella* Novák
1886, suppression proposed p. 284,
Whittington (3).

Phillipsia Portlock 1843 placed on
Official List of Generic Names p. 27,
P. kellyi [correction of *kellii*] *P.* 1843
spelling discussed p. 41, *P. jonesii*
P. 1843 (spelling discussed p. 40)
designated to be type of *Cummingella*
Reed 1942 pl. i figs. 1a–c (lectotype),
2a–c, Opinion 352.

Phillipsia cabralensis sp. n. p. 288
text-fig. 2 Carboniferous (Lower)
Spain (Asturias), Linares Rodríguez
Estud. geol. Inst. Mallada No. 12
1950.

Phillipsia hicksi Whidborne 1896
restr. (pl. 2 fig. 5) referred to *Cyrto-
symbole* p. 32, *P. h. W. partim* (pl. 2
fig. 8) tentatively to *C. (Macrobole)*
duodecimae R. & E. Richter p. 32
and *partim* (pl. 2 figs. 6, 7) to *Piltonia*
salteri gen. et sp. n. p. 42, *P. kassini*
Weber 1937 also referred to *Piltonia*
p. 41, Goldring.

Phillipsia kirgisica Web. p. 689,
Einor.

Phillipsia pustulata (Phillips) p.
172, *P. sp.* p. 179, Oswald.

Phillipsia? sp. p. 85, S. A. NORTH-
ROP in Kelley & Silver.

Phillipsiinae (Oehlert 1886) Přibyl
1946 discussed with synonyms Griffi-
thidinae, Ditomopyginae & Aniso-
pyginae Hupé 1953; subfamily taken
to include *Ameura*, *Anisopyge*, *Cum-
mingella*, *Cyphinioides*, *Delaria*, *Dito-
mopyge*, *Eocyphinium*, *Ezochops*,
Griffithides, *Linguaphillipsia*, *Meta-
phillipsia*, *Neogriffithides*, *Neoproetus*,
Paladin, *Phillipsia*, *Paraphillipsia*,
Pseudophillipsia, ? *Bollandia*; *Per-
moproetus* excluded p. 409 ff., Přibyl.

Phillipsinella Novák 1886 so dated
[rather than 1885] proposed addition
to Official List of Generic Names,
Phillipsella Oehlert 1886 [quod vide]
an objective synonym p. 284,
Whittington (3).

Phillipsinella parabola (Barr.) p.
10, Röhlich & Chlupáč.

Piazella Lochman 1947 discussed
p. 6, Rasetti.

Pilekia Barton 1915 referred to
Pilekiidae fam. n., *Parapilekia* Ko-
bayashi 1934 a synonym, *P. discreta*
(Barrande 1868) neotype for *Cheirurus*
discretus B. with possible synonym
C. gracilis B. 1868 p. 44 pl. viii
figs. 16–19 text-figs. 40a–c, *P. anxia*
sp. n. p. 45 pl. viii figs. 20–25,
?26–30, ?35 text-figs. 41 (reconstruc-
tion), ?44–45, *P. sp.* [may belong to
P. d. or *P. a.*] pl. viii figs. 31–34
text-figs. 42, 43, 46 Ordovician
(Tremadoc) Germany (Hof); *P.*
trapezoidalis Harrington 1938 re-
ferred tentatively to *Pharostomina*
gen. n. p. 31, *Sdzuy* Abh. senckenb.
naturf. Ges. No. 492 1955.

Pilekiidae fam. n. [Cheiruracea]
for *Pilekia*, *Anacheirurus*, *Tessela-
cauda*, ? *Metapliomerops*, ? *Meta-
pilekia* p. 42, *Pilekiidae* probably
ancestral to most Cheiruracea p. 44,
Sdzuy Abh. senckenb. naturf. Ges.
No. 492 1955.

Pilgrimiidae Hupé 1953 renamed
Paracedariidae nom. n. p. 131,
Hupé (4).

Piltonia gen. n. [no family assigned,
compared with *Waribole*, *Brachy-
metopus*, *Cordania*] p. 41 for type *P.*
salteri sp. n. including *Phillipsia*
hicksi Whidborne 1896 *partim* (pl. 2
figs. 6–7) Carboniferous (Lower)
England (Devon) p. 42 pl. ii figs.
8–13 text-figs. 3a–c, 6a–b; *Phillipsia*
kassini Weber 1937 referred to
Piltonia p. 41, Goldring Senck. leth.
36 1–2 1955.

Piriproetus Erben 1952 an inde-
pendent genus of Proetinae p. 181,
Hupé (4).

Placoparia tourneminei Rouault
p. 36, Dupuis.

Placoparia zippei tumida Klouč.
p. 211, Havlíček & Šnajdr.

Plataspella n. sp. [undescri.] p. 1515, **Wilson** (1).

Platycalymene Shirley 1936 referred to *Colpocoryphinae* subfam. n. p. 225, **Hupé** (4).

Platycolpus [form resembling] p. 286, **Cloud & Barnes**.

Platydiamesus Raymond 1937 referred to *Lecanopleurinae* subfam. n. p. 137, **Hupé** (4).

Platylichas ind. sp. for *Lichas lazatus* of Elles 1922 (p. 145) p. 424 pl. xl figs. 113–118, **Whittington** (2).

Platypeltoides crofti [sic] Callaway recorded from Tremadoc of Morocco p. 1593, **Choubert, Hindermeier & Hupé**.

Plethagnostus Clark 1923 a synonym of *Pseudagnostus* Jaekel 1909 p. 720, **Palmer** (1).

Plethagnostus jarillensis Rusc. p. 30, **Rusconi** (5).

Plethometopus p. 181, **Cloud & Barnes**.

Plethopeltis see N. gen.

Pliomera fischeri (Eichw.) p. 114 ff., P. cf. f. pl. iii fig. 2, **Bohlin**.

Pliomeridae — *Protopliomerops* & *Tesselacauda* referred pp. 414, 417, **Kobayashi** (1).

Pliomerops n. spp. a & b [undescri.] p. 19, **Hintze** (1).

Pliomerops [form with affinities to] p. 363, **Cloud & Barnes**.

Polytomurus Corda 1847 [so attributed] suppressed by ICZN in favour of *Dionide* Barrande 1847 p. 453, **Opinion 350**.

Polytomurus formosa (Barr.) p. 237, **Marek** (1).

Porterfeldia Cooper 1953 referred tentatively to *Raymondinidae* p. 128, considered related to *Triarthrus* p. 156, **Hupé** (4).

Poulsenia Resser 1936 referred to *Antagminae* and provisionally restricted to Greenland forms p. 5, *P. grönwalli* (Poulsen) see *Solenopleura grönwalli*, **Rasetti**.

Pradesia Thorall 1935 referred tentatively to *Isocolidae* p. 129, *P. martyi* T. text-fig. 130 (2) drawing, **Hupé** (4).

Prionopeltis archiaci (Barr.) p. 581, *P. striatus striatus* (B.) p. 582, **Bouček & Přibyl**.

Prionopeltis archiaci (Barr.) p. 527, *P. sp.* p. 543, **Svoboda & Prantl** (4).

Prionopeltis striatus (Barr.) p. 383, **Svoboda & Prantl** (2).

Prionopeltis striatus & *P. sp.* cf. *striatus* (Barr.) pp. 354, 334, *P. sp.* p. 338, *P. archiaci* (B.) p. 346, **Horný**.

Prionopyge Harrington & Leanza 1942 considered a subgenus of *Proceratopyge* p. 67, **Kobayashi & Ichikawa**.

Proasaphiscus granulatus sp. n. p. 90 pl. vi fig. 11, *P. planilimbatus* sp. n. p. 90 pl. iv figs. 18–20, pl. v figs. 1–3, *P. quadraticaudatus* sp. n. p. 91 pl. v figs. 4–7 Cambrian (Middle) Manchuria; *P. planus* Resser & Endo 1937a synonym of *P. centronatus* R. & E. p. 89, *P. ephori* of R. & E. 1937 *partim* (pl. 39 fig. 11) referred to *Manchuriella* sp. undt. p. 88, *P. sp. R. & E.* 1937 referred to synonymy of *Aojia reflexa* sp. n. p. 64; *P. ephori* (Walcott) listed p. 21, *P. quadrilateralis* R. & E. p. 21, *P. conoideus* R. & E. p. 12, *P. sp.* p. 12, *P. humilis* R. & E. p. 22, *P. yabei* R. & E. p. 24, *P. mantouensis* R. & E. p. 30, *P. cfr. m.* p. 48, *P. machidai* E. p. 34, *P. affluens* R. & E. p. 36, *P. willisi* R. & E. p. 48, **Endo** Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Proasaphiscus quadraticaudatus Endo, *P. yabei* Resser & E. p. 110, **Endo** (2).

Proaulacopleura Kobayashi 1936 referred tentatively to *Olenidae* incertae subfamiliae [quod vide] p. 19, **Sdzuy**.

Proceratopyge Wallerius 1895 discussed and referred to *Proceratopyginae* subfam. n., *P. (Proceratopyge) liaotungensis* sp. n. Cambrian (Upper) Manchuria (Liaotung) p. 69 pl. xi figs. 1–9, following spp. also referred to *P. (P.)—nathorsti* Westergård 1922, *similis* W. 1947, *magnicauda* W. 1948, *lata* & *nectans* Whitehouse 1939, *fragilis* Troedsson 1937 [for *Lopnorites f. T.*] text-fig.

(reconstruction) p. 68; *P. (Kogenium)* Kobayashi 1935 so referred; *P. (Lopnorites)* T. 1937 so referred & taken to include also *grabau* T. 1937, *tullbergi* Westergård 1922, *rutellum* [sic] & *polita* Whitehouse 1939 p. 68; *P. (Prionopyge)* Harrington & Leanza 1942 so referred p. 67, **Kobayashi & Ichikawa** Trans. palaeont. Soc. Japan NS No. 19 1955.

Proceratopyginae subfam. n. (Ceratopygidae) for *Proceratopyge* [quod vide] and ? *Ceratopeltis* p. 67, **Kobayashi in Kobayashi & Ichikawa** Trans. palaeont. Soc. Japan NS No. 19 1955.

Prochuangia imamurai sp. n. p. 69 pl. x fig. 12 *pars* Cambrian (Upper) Manchuria, **Endo** Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Prochuangia imamurai Endo p. 109, **Endo** (2).

Proerbia prisca Lermontova refigured p. 109 pl. xvi figs. 1, 1a, **Lermontova** (1).

Proetid p. 136, **Edgell**.

Proetina latimargo Přib. p. 154, **Chlupáč** (2).

Proetinae — *Drevermannia* Richter referred p. 504, **Přibyl & Plas**.

Proetus affinis Bouč., *P. sp.* p. 314, **Chlupáč** (1).

Proetus (P.) affinis Bouč. p. 212, *P. (P.) aff. tuberculatus* Barr. p. 213, *P. (P.)* cf. *koeneni* Maurer, *P. (P.) bohemicus* B. p. 215, *P. (P.) unguiloides* B., *P. (Cornuproetus) lepidus* (B.), *P. (C.) dufresnoyi* (B.) p. 219, **Svoboda & Prantl** (1).

? *Proetus altepinus* sp. n. p. 4 [unillustr.] Ordovician Argentina (Mendoza), **Rusconi** Bol. paleont. B. Aires No. 30 1954.

Proetus (P.) bohemicus (Hawle & Corda), *P. (P.) koeneni* Maurer, *P. (P.) myops*, *P. (P.) retroflexus*, *P. (P.) orbitatus*, *P. (P.)* cf. *glandiferus*, *P. (P.) lusor*, *P. (P.) tuberculatus* Barr. spp., *P. (P.) microphthalmus* Nov., *P. (P.) sp.*, *P. (Cornuproetus) buchi* (H. & C.), *P. (C.) complanatus* (B.), *P. (C.)* cf. *pictus* (Gieb.), *P. (C.)* cf. *dufresnoi*

(H. & C.), *P. (C.) sp.*, *P. (Sculptoproetus) sculptus* B., *P. (Lepidoproetus) sp.*, *P. (Eremiproetus) eremita*, *P. (E.) natator* B. spp., *P. (Unguliproetus) unguiloides*, *P. (U.) sp.* [n. sp. on p. 149] aff. *ryckholti*, *P. (U.) serus* B. spp., *P. (U.) sp.* listed pp. 153–154, *P. (Lepidoproetus) lepidus* (B.) p. 151, *P. (L.) cf. kegeli* Erben p. 131, **Chlupáč** (2).

Proetus folliceus Hall & Clarke p. 184, **Kindle & Eidman**.

Proetus (Proetus) guerangeri (Oehlert et Davoust) p. 17, *P. sp.* p. 20, **Pillet** (2).

Proetus koeneni Maur. p. 438, **Svoboda & Prantl** (3).

Proetus mořinensis Přibyl p. 524, *P. affinis* Bouček p. 530, *P. (Eremiproetus) complanatus* & cf. c. Barr., *P. (E.)* cf. *eremita* B. p. 533, *P. (Cornuproetus) sculptus* Barr. p. 539, **Svoboda & Prantl** (4).

Proetus orbitatus Barrande p. 146 pl. xxi fig. 19, *P. group bohemicus* B. p. 147 pl. xx figs. 27–29, pl. xxi fig. 20 from Sahara, **Le Maître** (2).

Proetus pichypuelchensis sp. n. p. 47 pl. v fig. 7 Ordovician (Lower) Argentina (Mendoza), *P. altepinus* R. illustrated p. 59 pl. iv fig. 9, **Rusconi** Rev. Mus. Hist. nat. Mendoza 8 1–4 1955.

Proetus ryckholti Barr. p. 383, **Svoboda & Prantl** (2).

Proetus ryckholti Barr. & aff. r. p. 349ff., *P. sp.* p. 334, *P. mořinensis* Přibyl p. 362, **Horný**.

Proetus (Proetus) ryckholti Barr., *P. (Cornuproetus) intermedius* B. p. 581, *P. (C.) venustus* B. p. 582, **Bouček & Přibyl**.

Proetus sp. (near *ryckholti* Barr.), *P. sp.* (near *decorus* Barr.) p. 1, **Růžicka & Bouška**.

Proetus tenuimargo Rud. Richter p. 89, *P. sp.* p. 23ff., *P. sp.* (*cuvieri* group) p. 28, **Krömmelbein et al.**

Proetus (Proetus) tenuimargo Richter p. 312, **Struve**.

Proetus sp. p. 1988, **Fisher**.

Proetus sp. listed p. 112, **Lawson**.

Prokootenia Lermontova 1940—implied probable synonymy with *Micmacca* Matthew 1895 [quod vide] to which its type *P. rara* L. is tentatively referred p. 87, **Lermontova** (1).

Proliostracus Poulsen 1932 discussed p. 5, *P. goodwini* Resser referred to *Onchocephalus* p. 17, **Rasetti**.

Pronileus illaeniformis Pompeckj in Wurm 1925 [nom. nud.] may be *Hemibarrandia triangula* sp. n. p. 25, **Sdzuy**.

Proparia incertae familiae see *Curiaspis* gen. n.

Prosaukia ? *orientalis* Kobayashi p. 109, **Endo** (2).

Prosaukia recorded p. 2055, **Flower**.

Prosaukiinae — *Stenosaukia* Raymond 1937 probably belongs p. 175, **Hupé** (4).

Protarchaeogonus gen. n. [Familia incerta, compared with *Panarchaeogonus*] for type *P. moroffi* sp. n. p. 40 pl. vii figs. 2-75, 76-7 [pygidia attributed], text-figs. 36a-b (reconstructions) Ordovician (Tremadoc) Germany (Hof), **Sdzuy** Abh. senckenb. naturf. Ges. No. 492 1955.

Protillaenus Raymond 1937—*Blowntina* Lochman 1944 considered a synonym, *P. spp.* [pygidia] showing possible sexual dimorphism p. 723 pl. lxxix figs. 2, 3, 5, **Palmer** (1).

Protohedinia gen. n. [Olenidae (Oleninae)] for type *P. distincta* [distincta on pl. expl.] sp. n. p. 79 pl. iv fig. 13, *P. quadrata* sp. n. p. 80 pl. iv figs. 14-16 Cambrian (Middle) Manchuria, **Endo** Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Protolenida ord. n. for *Protolenidae* p. 51, **Lermontova** Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Protolenidae Lermontova MS [so accredited] discussed & taken to include *Protolenus*, *Bergeroniellus*, *Blayacina*, *Micmacca*, *Micmaccopsis*, and *Bergeroniaspis*, *Paramicmacca*, *Anabaraspis* genn. n. p. 51, **Lermontova** (1).

Protolenidae lumachelle pl. xii fig. 4, **Lermontova** (1).

Protolenus Matthew 1892 discussed p. 53, *P. dzevanovskii* sp. n. p. 54 pl. vi figs. 1, 1a-f, pl. vii figs. 1, 1a-i, *P. grandis* sp. n. p. 59 pl. viii figs. 1, 1a-f Cambrian (Lower) U.S.S.R. (Siberia), **Lermontova** Lower Cambrian trilobites and brachiopods from Eastern Siberia, 1951.

Protolenus sp. p. 972, **Hupé** (3).

Protopeltura praecursor (Wester-gård) text-fig. 1A, **Tjernvik**.

Protopliomerops Kobayashi 1934 referred to *Pliomeridae*, *P. subquadratus* sp. n. p. 414 pl. ii figs. 3-4, *P. radiatus* sp. n. p. 416 pl. ii figs. 5a-b, 6, *P. longispinus* sp. n. p. 417 pl. ii fig. 7 Ordovician (Lower) Canada (B.C.), **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Protopliomerops n. spp. a, b, c [undeser.] p. 15, **Hintze** (1).

Protopliomeropsinae — *Strototropis*, *Leiostrototropis*, ? *Tesselacauda* and *Pseudocybele* referred p. 245, **Hupé** (4).

Protopresbynileus Hintze 1954 referred to *Asaphinae*, *P. ? aff. willdeni* (Hintze) p. 446 pl. v figs. 18-19, pl. viii fig. 15, **Kobayashi** (1).

Protostygina see *Stygina*.

Protypus hitchcocki (Whitfield) 1884 cast of missing holotype figured p. 799 pl. lxxiv fig. 9, **Shaw** (2).

Protypus marginatus Rasetti, *P. typicus* (Resser) listed p. 3, **Rasetti**.

Prozacanthoides sp. indet. p. 799 pl. lxxiv fig. 15, **Shaw** (2).

Prozacanthoides sp. undet. listed p. 3, **Rasetti**.

Psalikilus n. sp. a [undeser.] p. 15, *P. sp. A* [undeser.] p. 16, **Hintze** (1).

Pseudagnostidae see *Pseudorhaptagnostus* gen. n.

Pseudagnostinae discussed p. 92, *Litagnostus* Rasetti referred p. 87, **Palmer** (2).

Pseudagnostus Jaekel 1909—*Plethagnostus* Clark 1923 and *Rhapatagnostus* [sic] Whitehouse 1936 considered synonyms, Troedsson's interpretation of pygidial axial furrows supported, *P. communis* (Hall &

Whitfield) p. 720 pl. lxxvi figs. 1-3, *P.?* *nordicus* (Lochman) [but may represent new genus] for "*Agnostus*" n. L. with synonym "*A.*" *valentinus* L. p. 721 pl. lxxvi figs. 5, 7, **Palmer** (1).

Pseudagnostus Jaekel 1909 discussed and Kobayashi's interpretation of the posterior part of the pygidial axial lobe upheld p. 93, *P. communis* (Hall & Whitfield) 1877 ontogeny of pygidium described and *Agnostus neon* H. & W. [cotypes figured] tentatively a synonym p. 94 pl. xix figs. 16, 19-21, pl. xx figs. 4-11, 14, *P. convergens* sp. n. showing cephalic muscle scars p. 96 pl. xix figs. 14-15, pl. xx fig. 13, *P. laevis* sp. n. p. 97 pl. xix figs. 8-9, 11-12 Cambrian (Upper) U.S.A. (Nevada), *P. prolongus* (H. & W.) 1877 both cotype cephalo [one described by H. & W. as pygidium] figured p. 98 pl. xix figs. 17, 18, 22, *P.?* p. 100, **Palmer** J. Paleont. **29** 1 1955.

Pseudagnostus cyclopygeformis (Sun) p. 9, **Endo** (1).

Pseudagnostus cyclopygeformis (Sun) p. 109, **Endo** (2).

Pseudagnostus douvillei Bergeron 1899—*Agnostus koerferi* Monke and probably *A. pii* Airaghi synonyms p. 90, **Kobayashi** (2).

Pseudagnostus obsoletus sp. n. p. 10 pl. ii figs. 8-10 Cambrian (Upper) U.S.S.R. (Kazakhstan); *P. orientalis* Kobayashi referred to *Pseudorhaptagnostus* gen. n. p. 12, **Lermontova** Upper Cambrian trilobites and brachiopods from Boshche-Kulya, 1951.

Pseudagnostus orientalis Kobayashi p. 65, **Kobayashi & Ichikawa**.

Pseudagnostus recorded p. 426, **Lu**.

Pseudasaphus perstriatus sp. n. p. 138 pl. v figs. 3-5, pl. vi figs. 1-2, text-fig. 8B, *P. duplicatus* sp. n. p. 141 pl. v figs. 2, 7, pl. vi figs. 3-4, text-fig. 8A Ordovician (Lower) Sweden (Öland), ? *P.* sp. p. 114 pl. v fig. 6, ? *P. globifrons* (Eichw.) p. 115, **Bohlin** Bull. geol. Instn Univ. Upsala **35** 1955.

Pseudasaphus tecticaudatus (Steinh.) p. 11 ff., *P.* sp. p. 15, **JAANUSSON** in **Jaanusson & Mutvei**.

Pseudoasaphus [sic] *globifrons* Eichw. illustrations of Panderian organs text-fig. 3, **Hupé** (1).

Pseudobasilicus nobilis (Barr.) p. 4, **Röhlich & Chlupáč**.

Pseudocybele Ross 1951 referred to Protopliomeropsinae p. 245, **Hupé** (4).

Pseudocybele n. spp. a & b p. 16, **Hintze** (1).

Pseudokainella ? sp. A [undescribed] p. 12, *P.?* n. sp. b [undescribed] p. 13, **Hintze** (1).

Pseudokoldinioidia gen. n. [Shumardidae] for type *P. granulosa* sp. n. p. 72 pl. ix fig. 6 Cambrian (Upper) Manchuria, **Endo** Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Pseudolisania Kobayashi 1935 a subjective synonym of *Cheilocephalus* Berkey 1898 [quod vide], *P. raaschi* & *P. texana* Lochman synonyms of *C. breviloba* (Walcott) p. 759, **Palmer** (1).

Pseudopetiguris? *globulus* sp. n. p. 40 pl. vii figs. 8-10 text-figs. 37-39 Ordovician (Tremadoc) Germany (Hof), **Sázuy** Abh. senckenb. naturf. Ges. No. 492 1955.

Pseudorhaptagnostus gen. n. [Pseudagnostidae] for type *P. simplex* sp. n. p. 12 pl. ii figs. 11-17, pl. i fig. 1 pars r U.S.S.R. (Kazakhstan), *P. punctatus* sp. n. p. 13 [unillustrated] U.S.S.R. Cambrian (Upper); *Pseudagnostus orientalis* Kobayashi referred to *Pseudorhaptagnostus*, **Lermontova** Upper Cambrian trilobites and brachiopods from Boshche-Kulya, 1951.

Psilaspis Resser & Endo in Kobayashi 1935 a synonym of *Manchuriella* R. & E., *P. manchuriensis* R. & E. being a synonym of *M. temenus* (Walcott) p. 88, *P.?* *conveza* Endo 1937 referred to *M.* p. 88, **Endo** (1).

Psilaspis (*Entorachis*) subgen. n. p. 94 for type *Anomocare alcione* Walcott 1913 and including *Ptychoparia memor* Reed 1910, *P. (Entorachis) shantungensis* sp. n. p. 95 pl. xiv

figs. 1-4 Cambrian (Middle) China (Shantung), **Kobayashi** Trans. palaeont. Soc. Japan NS No. 20 1955.

Psychopyge elegans G. & H. Ter-mier [type of *P.*] may be a pygidial fragment of *Coronura* p. 151 n, **Le Maître** (2).

Pterocephalia Roemer 1849 discussed & referred to Ptychopariidae p. 751, *P.* cf. *P. occidentalis* Walcott p. 752 pl. lxxxvi figs. 9-10, pl. lxxxvii figs. 1-2, **Palmer** (1).

Pterocephalia Roemer 1849 referred to Paracoosinae p. 37, **Sdzuy**.

Pterocephalia sanctisabae Roemer cast of syntype refigured pl. xxxviii figs. 25-26, **Cloud & Barnes**.

Pterocephalia fragments p. 1515, **Wilson** (1).

Pterocephalina Resser 1938 referred to Paracoosinae, *Dikelocephalus celticus* Salter 1866 probably belongs to *Pterocephalina*; *P.* (*Leimitzia*) subgen. n. for type *Conocephalites bavari-cus* Barrande 1868 neotype p. 37 pl. vii figs. 89-97, 101 text-figs. 35a (reconstruction)-c Ordovician (Tremadoc) Germany (Hof), **Sdzuy** Abh. senckenb. naturf. Ges. No. 492 1955.

Pterocephalus asiaticus Walcott p. 10, **Endo** (1).

Pterygometopus callicephalus Green p. 33, **Baillie**.

Pterygometopus sp. p. 127, **Bohlin**.

Ptychagnostus (*Triplagnostus*) *gibbus* p. 107 ff., *P. punctuosus* p. 109, *P.* sp.? p. 114, *P. atavus* p. 118, **Spjeldnaes**.

Ptychagnostus pichum Rusc. p. 9, **Rusconi** (5).

Ptychaspidae — *Iranaspis* tentatively assigned p. 177, **Hupé** (4).

? *Ptychaspis bicostatus* sp. n. p. 3 [unillustr.] Cambrian (Upper) Argentina (Mendoza), **Rusconi** Bol. paleont. B. Aires No. 31 1955.

? *Ptychaspis bicostatus* Rusc. illustrated p. 35 pl. iii fig. 2, **Rusconi** (5).

Ptychaspis striata recorded p. 2055, **Flower**.

Ptychaspis pygidium listed p. 460, **Okulitch & Bell**.

Ptychoparella Poulsen 1927 should be restricted to the type species and Lower Cambrian forms excluded p. 7; *P. taylori*, *P. minor* & [?] *P. walcotti* Resser spp. referred to *Eoptychoparia* gen. n. p. 14, **Rasetti**.

Ptychoparella discussed p. 779, *P. teucer* (Billings) 1861 of which *P. georgiensis* Resser 1937 [cast figured] a synonym p. 800 pl. lxxiv figs. 11-14, *P.?* *kindlei* R. 1937 p. 800; *P. billingsi* and *P. vermontensis* R. 1937 synonyms of *Billingsaspis adamsii* p. 780, *P. swantonensis* R. 1937 of *P. walcotti* R. which is referred to *Billingsaspis* p. 781, **Shaw** (2).

Ptychoparia adamsii and *P. vul-ancus* see *Billingsaspis*, following records of both spp. excluded: Walcott 1886 (& 1891) pl. 26 figs. 1c [to *Ptychoparella teucer*], 4 [to *Periomma typicalis*], 4a [to *Antagmus? simplex*], Matthew 1897 pl. 3 figs. 2a-b, Walcott 1912 [to *P. typicalis*] p. 779, **Shaw** (2).

Ptychoparia czekanovskii Toll referred to *Triangulaspis* Lermontova p. 17, *P. bella* Rjonsnitzy to *Solenopleurella* [quod vide] p. 133, **Lermontova** (1).

Ptychoparia [misspelt *Ptychopria*] *fengtienensis* sp. n. p. 73 pl. i fig. 1 Cambrian (Lower) Manchuria, *P. orientalis* Resser & Endo 1937 with synonyms *Elrathia manchuriensis* R. & E. and *Manchuriella prisca* R. & E. p. 73, *P.?* *grabau* R. & E. with synonym *M. angustilimbata* R. & E. p. 74, *P. kochibei* Walcott p. 11, *P.* cf. *orientalis* p. 17, **Endo** Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Ptychoparia lux Walcott type of *Luxella* gen. n. p. 20, **Rasetti**.

Ptychoparia memor Reed 1910 referred to *Psilaspis* (*Entorachis*) subgen. n. p. 94, **Kobayashi** (2).

Ptychoparia orientalis Resser & Endo p. 110, **Endo** (2).

Ptychoparia striata (Emmr.) p. 185 ff., **Havlíček & Šnajdr**.

Ptychoparida see Namanoidae fam. n.

Ptychoparidae see Eulominae subfam. n. and Elviniinae.

Ptychopariidae — discussion of Lower Cambrian genera from North America p. 4 ff., Antagminae Hupé a subfamily p. 8, Periomellinae subfam. n. p. 28, Rasetti.

Ptychopariidae see *Blandicephalus*, *Dytremacephalus* and *Labiostria* gen. n.

Ptychopariinae—*Agraulopsis* Růžička 1939 referred tentatively p. 108, Hupé (4).

Ptychopyge excavato-zonata Ang. p. 116 pl. v fig. 8, *P. limbata* A. suggested that sp. be neglected p. 140, Bohlin.

Quadraticephalus calchas (Walcott) p. 109, Endo (2).

Quadraticephalus ? minus sp. n. p. 96 pl. viii figs. 16–17 Cambrian (Upper) Manchuria, *Q. ? calchas* (Walcott) p. 8, Endo Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Raaschella ornata Lochman p. 764 pl. lxxxix figs. 7–9, *Terranovella bristolensis* Resser referred to *Raaschella*, Palmer (1).

Rananasus vertical range pl. xiv, *R. conicus* Cullison pl. xlii figs. 10–15, *R. aff. R. brevicephalus* C. pl. xlii figs. 16–18, Cloud & Barnes.

Raphiophoridae classified into Raphiophorinae and Ampyxininae subfam. n. p. 261, Hupé (4).

Raphiophoridae discussed p. 14, see also *Cnemidopyge* gen. n., Whittard.

Raphiophorinae newly as a subfamily of Raphiophoridae for *Raphiophorus*, *Lonchodomas* and *Ampyx* p. 261, Hupé (4).

Raphiophorus see *Rhaphiophorus*.

Raphiophorus Angelin 1854 referred to Raphiophorinae p. 261, Hupé (4).

Raphiophorus tenellus (Barr.) p. 10, Röhlich & Chlupáč.

Raphiophorus sp. [meraspid stages, probably representing a new sp.] p. 23 pl. ii figs. 13–16, Whittard.

Raymondaspis Přibyl 1949 discussed with diagnosis & referred to Styginidae p. 20, *R. limbatus* (Angelin 1854) p. 21 pl. iv figs. 2, 4–9, pl. v figs. 6, 8, *R. nitens* (Wiman 1906) lectotype selected & figured p. 22 pl. iv figs. 1, 3, *R. gregarius* (Raymond 1920) [for *Bronteopsis* g. R.] and *R. ardmillanensis* (Reed 1904) [for *B. a.* Reed] p. 23, *R. angelini* (Billings) and *R. planus* (Raymond) p. 12 so referred, Skjeseth.

Raymondella Reed 1935 referred to Ampyxininae subfam. n. p. 262, Hupé (4).

Raymondinidae — *Pemphigaspis* and tentatively *Porterfieldia* referred p. 128, Hupé (4).

Reacalymene Shirley 1936 referred to Colpocoryphinae subfam. n. p. 225, Hupé (4).

Reacalymene—possible attribution of *Calymene croneisi* Roy and *C. fayettensis* Slocum p. 148, Whittington (1).

Redlichia chinensis Walcott 1913—*R. manchuriensis* Resser & Endo and *R. murakamii* R. & E. considered synonyms p. 60, Endo (1).

Redlichia chinensis Walcott p. 111, Endo (2).

Redlichia noetlingi (Redl.) hypostome and ventral sutures described p. 130 ff. text-figs. 1 (reconstruction of cephalon)—3 [drawings]; *R. idonea* Whitehouse may be a synonym of *R. forresti* Etheridge p. 131, Schindewolf.

Reedocalymene Kobayashi 1951 referred to Calymenidae (Reedocalymeninae) subfam. n. p. 227, Hupé (4).

Reedocalymeninae subfam. n. [Calymenidae] p. 227 for *Reedocalymene* and *Calymenesun*, Hupé Ann. Paléont. 41 1955.

Reedolithus carinatus — record of Thorslund 1948 (p. 347) considered doubtful p. 46 n, L. F. STØRMER in Hagemann & Spjeldnaes.

Reedops see *Phacops*.

Remipyga gen. n. [Cheirurinae] p. 127 for type *R. glabra* sp. n. p. 128 pl. lix figs. 8, 10–12, pl. lx figs. 1–4 Ordovician (? Upper) Canada (Baffin

I.); *Ceraurinus marginatus* Barton 1913 [type of *C.*] may be congeneric with *R. g.* p. 128, *C. icarus noduliferous* [sic] Roy 1941 (refigured) may be conspecific with *R. g.* p. 130 pl. lix fig. 9; *R. icarus* (Billings), *R. meekanus* (Miller), *R. daedalus* (Cox) [enlarged to include several of Troedsson's 1928 specimens], *R. ? platycanthus* (Bradley) all so referred and discussed p. 130, **Whittington** Mem. geol. Soc. Amer. No. 62 1954.

Remopleuridae — close affinities with Richardsonellidae such as *Apatokephalus* suggest that the families may be united into a superfamily p. 25, **Sdzuy**.

Remopleurides salteri [? var. *giranensis*] Reed referred to *Hypodiceranotus* text-fig. 162 (3), **Hupé** (4).

Remopleurides sp. Roy 1941 referred to *Hypodiceranotus* sp. ind. p. 120, **Whittington** (1).

Remopleurides sp. p. 129, **Bohlin**.

Remopleurididae — reference to Asaphoidae suggested tentatively p. 701n, **Hupé** (1).

Rhamphopyge gen. n. [family uncertain] p. 472, *R. altipolum* sp. n. p. 473 pl. vi figs. 9a-b, pl. ix figs. 8a-b (drawings) Ordovician (Lower) Canada (B.C.), **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Rhapatagnostus [sic] Whitehouse 1936 a synonym of *Pseudagnostus* Jaekel 1909 p. 720, **Palmer** (1).

Rhaphiophorus [sic] *portlocki* (Barr.) p. 237, **Marek** (1).

Richardsonellidae Raymond 1924 discussed, Kainellidae a synonym, Kobayashi's 1953 subfamilies [of Kainellidae] considered not sharply differentiated, close affinities of *R.* with Remopleuridae (not with Dikelecephalidae), *Apatokephalus* referred to *R.* p. 25, **Sdzuy**.

Richardsonellidae — *Lauzonella* referred p. 150, Sárkiidae considered descended from Richardsonellidae p. 151, **Hupé** (4).

Rimouskia Resser 1938—**Hupé's** assignment to Saoidae accepted p. 30, *R. typica* R. with synonym *R.*

spinosa R. [both holotypes refigured] p. 31 pl. i fig. 10 (drawing), pl. vi figs. 1-6, **Rasetti**.

Rogersvillia gen. n. [Genevievellidae] p. 162 for type *Genevievella rogersvillensis* Resser Cambrian (Upper) U.S.A., **Hupé** Ann. Paléont. 41 1955.

Rudagnostidae fam. n. for *Rudagnostus* and *Eurudagnostus* genn. n. p. 7, **Lermontova** Upper Cambrian trilobites and brachiopods from Boshche-Kulya, 1951.

Rudagnostus gen. n. [Rudagnostidae] p. 7 for type *Aagnostus rudis* Salter, *R. brevispinus* see *Eurudagnostus* ? b., **Lermontova** Upper Cambrian trilobites and brachiopods from Boshche-Kulya, 1951.

Saltaspis see *Salteraspis*.

Saltaspis sp. [? for *Jujuyaspis* sp. Tjernvik 1953] text-fig. 1D, **Tjernvik**.

Salteraspis [recte *Saltaspis*] Harrington & Leanza 1952 considered a synonym of *Jujuyaspis* Kobayashi 1936 p. 467, **Kobayashi** (1).

Salterolithus cf. *harnagensis* Bancroft 1929 p. 420 pl. xl figs. 94-96, 100-101 text-fig. 6 (reconstruction), **Whittington** (2).

Saoidae **Hupé** — assignment of *Rimouskia* Resser accepted p. 30, **Rasetti**.

Saratogia latefrons King 1937 type of *Iranella* gen. n. p. 97, **Hupé** (4).

Sárkiidae referred to Olenoidae, probably descended from Richardsonellidae p. 151, **Hupé** (4).

Saukia ? *orientalis* Resser & Endo p. 7, **Endo** (1).

Saukia ulrichi Resser & Endo, *S. ? orientalis* R. & E. p. 109, **Endo** (2).

Saukiinae vertical range pl. xiv, **Cloud & Barnes**.

Scharyia micropyga (H. & C.) p. 581, **Bouček & Frišl**.

Scharyia micropyga (H. & Cda) p. 314, **Chlupáč** (1).

Scharyia micropyga (Hawle & Corda) p. 151, **Chlupáč** (2).

Scharyia micropyga (H. & C.) p. 352, **Horný**.

Schistometopus Resser 1938 referred to *Solenopleurellinae* p. 107, **Hupé** (4).

Schizoproetus onyx (Rud. Richter)? p. 23 ff., **Krömmelbein et al.**

Sculptoproetus Erben 1951 an independent genus of *Proetinae* p. 181, **Hupé** (4).

Scutellidae see *Craigheadia* **gen. n.**

Scutellidae see Scutelluidae **nom. n.**

Scutellidae — relations to Styginiidae [quod vide] p. 24, **Skjeseth**.

Scutelluidae **nom. n.** (for Scutellidae R. & E. Richter 1925 non Gray 1825) — emendation of family name proposed; Bronteidae Corda 1847, Goldiidae Raymond 1913 and Eobronteidae Sinclair 1949 synonyms p. 291, **R. & E. Richter** Senck. leth. 36 3-4 1955.

Scutellum (*Scutellum*) *gervillei* (Barraude) p. 21, **Pillet** (2).

Scutellum haidingeri (Barr.), *S. partschi* (B.) p. 581, **Bouček & Příbyl**.

Scutellum haidingeri (Barr.), *S. partschi* (Barr.) p. 352, *S. planum* (B.) p. 377, **Horný**.

Scutellum cf. *haidingeri* Barr. p. 383, *S. lepidum* Bouč. p. 385, *S. (S.) porosum* (B.), *S. (Paralejurus) brongniarti* (B.) p. 388, **Švoboda & Prantl** (2).

Scutellum (*S.*) cf. *lepidum* Barr. p. 212, *S. (S.) přibylí* Prantl p. 213, *S. (S.)* cf. *conspersum* (P.) p. 215, *S. (S.)* cf. *palifer* (Beyr.) p. 216, *S. (S.) angusticeps* Barr., *S. (S.) sieberi* B., *S. (Thysanopeltis) speciosum* (Hawle & Corda) p. 219, **Švoboda & Prantl** (1).

Scutellum paliferum (Beyr.), *S. bohemicum* Ptl & Příb., *S. schöbli* (Nov.), *S. oblongum* (Hawle & Corda), *S. sp.* [n. sp. on p. 151] aff. *umbelliferum* (Beyr.), *S. viator*, *S. angusticeps*, *S. angusticeps inermis*, *S. rhinoceros*, *S. transversum*, *S. validum*, *S. setosum*, *S. sieberi*, *S. indocilis*, *S. cf. infaustum*, *S. spiniferum*, *S. asperulum*, *S. porosum*, *S. pustulatum*, *S. coelebs*, *S. elongatum*, *S. formosum* (Barr. spp.), *S. (Kolihipeltis) brevifrons* (B.), *S. (Paralejulus) campaniferum*

(Beyr.), *S. (P.) dormitzeri* (H. & C.), *S. (P.) hawlei* (Barr.), *S. (Thysanopeltis) speciosum* (H. & C.) listed p. 153, section of lumachelle of *S. paliferum* pl. v, *S. cf. přibylí* Ptl p. 151, **Chlupáč** (2).

Scutellum partschi (Barr.) p. 2, **Růžička & Bouška**.

Scutellum planum (Barr.) p. 526, *S. lepidum* Bouček p. 530, *S. umbellifer* [sic] (Beyr.) p. 531, *S. indocilis* (Barr.), *S. viator* (Barr.) p. 534, *S. cf. sieberi* (Barr.) p. 535, **Švoboda & Prantl** (4).

Scutellum umbelliferum (Beyr.), *S. přibylí* Ptl, *S. lepidum* Bouč. p. 314, **Chlupáč** (1).

Scutellum sp. p. 26, **Krömmelbein et al.**

Selenopeltis buchi (Barr.) p. 212, **Havlíček & Šnajdr**.

Selenopeltis buchi (Barr.) p. 4 ff., **Röhlich & Chlupáč**.

Semnocephalus Resser 1942 a subjective synonym of *Modocia* Walcott 1924 p. 763, **Palmer** (1).

Serrodiscus bellimarginatus (Shaler & Foerste 1888) p. 13 pl. i figs. 6-9, pl. ii fig. 11 pars, *S. cf. speciosus* (Ford 1873) p. 14 pl. i figs. 10-13, pl. ii fig. 11 pars both from Spitzbergen, **Winsnes**.

Serrodiscus sp. p. 972, **Hupé** (3).

Shantungia spinifera Walcott p. 110, **Endo** (2).

Shantungia spinifera Walcott p. 426, **Lu**.

Shumardia orientalis Mansuy 1916 type of *Eoshumardia* **gen. n.** p. 134, *S. longifrons* Troedsson 1937 type of *Shumardops* **gen. n.** p. 135, **Hupé** (4).

Shumardia sp. from Canada (B.C.) p. 471 pl. vii fig. 9, **Kobayashi** (1).

Shumardia ? sp. p. 30 pl. v fig. 40, **Sázuy**.

Shumardiidae see *Pseudokoldinioidia* **gen. n.**

Shumardiidae see *Lunacrania* **gen. n.**, *Cranidium* [undet. genus and species D] of Ross 1951 may belong to Shumardiidae p. 472, **Kobayashi** (1).

Shumardiidae referred to Utioidea p. 133, see *Eoshumardia* & *Shumardops* **genn. n.**, **Hupé** (4).

Shumardops **gen. n.** [Shumardiidae] p. 135 for type *Shumardia longifrons* Troedsson 1937 Tremadoc Tien-Shan text-fig. 134 *bis* (6) drawing, **Hupé** Ann. Paléont. **41** 1955.

Skreiaspis spinosus (Jahn) p. 186 ff., **Havlíček & Šnajdr**.

Solenoparia puteata Resser & Endo probably a synonym of *P. planifrons* R. & E.; *S. tersa* **sp. n.** p. 80 pl. v figs. 10–15, pl. viii fig. 18, *S. luna* **sp. n.** p. 81 pl. vi figs. 6–10, *S. subspherica* [subsp. *sphaerica* on pl. expl.] **sp. n.** p. 81 pl. v figs. 8–9, *S. sobyosiensis* **sp. n.** p. 82 pl. v figs. 16–17, pl. vi figs. 1–5, *S. tangshihensis* **sp. n.** p. 82 pl. vi fig. 18, pl. vii fig. 1 Cambrian (Middle) Manchuria, *S.* **sp. p.** 11, *S. bigranosa* E., *S. hemicycla* R. & E., *S. cfr. triangularis* R. & E. p. 15, *S. liaoyangensis* E. [erroneously called *n. sp.*] p. 21, *S. cfr. l.* p. 39, *S. sphaerica* E. p. 27, *S. intermedia* (Walcott) p. 12, *S. taitzuensis* R. & E., *S. cfr. triangularata* [? recte *cfr. triangularis*] R. & E. p. 22, *S. sp. p.* 40, **Endo** Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Solenoparia **sp. p.** 428, **Lu**.

Solenopariidae — *Eteraspis* and tentatively *Coleopachys* referred p. 116, **Hupé** (4).

? *Solenopleura cuyana* Ruse. p. 8, **Rusconi** (5).

Solenopleura ferganensis **sp. n.** p. 15 pl. i figs. 12–14, *S. sp. p.* 18 pl. iii fig. 9 U.S.S.R. (Turkestan), *S. weberi* **sp. n.** (MS) p. 17 [unillustr.] U.S.S.R. (Siberia) Cambrian (Middle), **Lermontova** Middle Cambrian trilobites and gastropods from Shody-Mira, 1951.

Solenopleura grönwalli Poulsen (type of *Poulsenia* Resser—quod vide)—considered that *S. borealis*, *S. bullata* & *S. similis* P. are conspecific with *S. grönwalli* p. 5, **Rasetti**.

Solenopleura parva, *S. munsteri* p. 107 ff., *S. spp.* p. 110, **Spjeldnaes**.

Solenopleura aff. *prantli* Růžička p. 186 ff., **Havlíček & Šnajdr**.

Solenopleura sibirica (Rjonsnitzy) of Lermontova 1940 see *Solenopleurella bella* (R.).

Solenopleura subcincta **sp. n.** p. 22 pl. v figs. 4, 5, 5a Cambrian (Upper) U.S.S.R. (Kazakhstan), **Lermontova** Upper Cambrian trilobites and brachiopods from Boshche-Kulya, 1951.

Solenopleurella bella (Rjonsnitzy) for *Ptychoparia bella* R. [mistakenly called *Solenopleura sibirica* (R.) by Lermontova 1940—refigured] p. 133 pl. xix figs. 1, 1a–f, **Lermontova** (1).

Solenopleurellinae — *Schistometopus* referred p. 107, **Hupé** (4).

Solenopleuridae Angelin discussed p. 132, **Lermontova** (1).

Solenopleuroidae — Isocolidae referred p. 128, **Hupé** (4).

Sonoraspis Stoyanow 1952 discussed and defended p. 469, *S. californica* **sp. n.** Cambrian (Middle) U.S.A. (California) p. 468 pl. i figs. 1–2; *Glossopleura* **sp.** Lochman 1952 and tentatively *G. leona* L. referred to *S. p.* 468, **Stoyanow & Susuki** Bull. geol. Soc. Amer. **66** 4 1955.

Sphaerexochus see *Sphaerexochus*.

Sphaerexochus mirus Beyr. p. 379, *S. mirus* Beyr. nov. var. [undescribed] p. 346, *S. mirus* nov. mut. [undescribed] p. 384, **Horný**.

Sphaerophthalmella [called *Sphaerophthalmoides* & *Sphaerophthalmella* on pl. expl.] **gen. n.** [Leptoplastinae] p. 463 for type *S. inexpectans* **sp. n.** Ordovician (Lower) Canada (B.C.) p. 464 pl. vii figs. 10a–b, 11, pl. ix figs. 12a–b (drawings), **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] **9** 1955.

Sphaerophthalmus cf. *alatus* (Boeck) p. 529, **Lindström**.

Sphaerexochus [sic] *mirus* Barr. (small forms) p. 1 text-fig. 1, **Růžička & Bouška**.

Sphaerexochus [sic] *mirus* Barr. p. 207, *S. mirus* mut. [undescribed] p. 208, **Svoboda & Prantl** (1).

Sphaerexochus [sic] *mirus* Barr. mut. nov. [undescribed] p. 524, **Svoboda & Prantl** (4).

Stapeleyella gen. n. [Trinucleidae] p. 35 for type *S. inconstans* sp. n. Ordovician (Middle) Britain (Shropshire) [including the records of *Trinucleus munchisoni* by Reed 1912, 1914, Whittington 1941 & that of *T. gibbsii* by La Touche 1884] p. 36 pl. iv figs. 7-13, *S. munchisoni* (Salter) lectotype chosen p. 39, Whittard Palaeontogr. Soc. [Monogr.] 109 1955.

Staurocephalus munchisoni Barr. p. 377, *S. aff. munchisoni* Barr. (n. var.?) [undeser.] p. 362, Horný.

Staurocephalus sp. p. 1, Růžicka & Bouška.

Stenocombus Raymond 1937 referred tentatively to Emmrichellidae p. 131, Hupé (4).

Stenopareia avus Holm p. 237, Martna.

Stenopilus elongatus Rasetti text-fig. 99 (4 views), Hupé (4).

Stenopilus p. 147, *S.* vertical range pl. xiv, Cloud & Barnes.

Stenosaukia Raymond 1937 probably belongs to Prosaukiinae p. 175, Hupé (4).

Stephanocare ? bergeroni Kobayashi p. 93 pl. xiv fig. 9; *S. ?* sp. Monke 1903 referred to *Blackwelderia monkei* (Walcott) p. 90, Kobayashi (2).

Stephanocare ? monkei Walcott type of *Blackwelderioides* gen. n. p. 146, Hupé (4).

Stephanocare richthofeni Monke, *S.* sp. p. 428, Lu.

Stephanocare richthofeni Nonke [sic] p. 32, *Stepharocare* [sic] sp. p. 10, Endo (1).

Stephanocare richthofeni Monke p. 110, Endo (2).

Strototropis Raymond 1937 referred to Protopliomeropsinae p. 245, Hupé (4).

Stygina Salter 1853 discussed, *S. latifrons* (Portlock 1843) from Scandinavia p. 13 pl. i figs. 1-8 [fig. 3 cf. l.], pl. ii figs. 1-8 [fig. 6 cf. l.], pl. iii fig. 7, pl. iv fig. 10, *S. minor* sp. n. [nom. nud. 1953] Ordovician (Middle) Norway (Oslo) p. 13 pl. iii figs. 1-6, *S. angustifrons* Warburg 1925 p. 14, *S. plautoni* (Schmidt 1904) for *Ogygia*

dilatata plautoni S. p. 14; *S. (Proto-stygina)* Prantl & Přibyl 1949 discussed p. 15 and considered ancestral to Illaenidae p. 25, Skjeseth Norsk geol. Tidsskr. 35 1955.

Styginidae see *Craigheadia* gen. n.

Styginidae Vogdes 1893 discussed and taken to include *Stygina*, *Raymondaspis*, *Bronteopsis* and *Leptopilus* p. 10; relations to possibly ancestral Zacanthoids and presumed descendants Scutellidae & Illaenidae p. 24 text-fig. 2, Skjeseth.

Sunia see *Amphoton*.

Symphysurina Ulrich 1924 discussed and referred to *Symphysurinae* subfam. n. p. 426 ff., *S. (Symphysurina)* key to spp. p. 430, *S. (S.) spicata* U. p. 430 pl. iii figs. 8-9, *S. (S.)* s. var. *eugenia* Walcott [referred to *S. (Symphysuroides)* on pl. expl.] so considered p. 430 pl. iii fig. 22, *S. (S.)* cfr. *corlissensis* (Raymond) for cfr. *Symphysurinella* c. R. [pl. ix figs. 3a-b] p. 431 pl. vii figs. 22a-b, *S. (S.) tatondrukensis* [also spelt *tatondakensis*] sp. n. for *S. aff. woosteri* Kobayashi 1936 Canada (Yukon) pp. 376, 429, *S. woosteri* pygidia of Powell 1935 may not belong p. 429; *S. (Symphysuroides)* Raymond 1937 so referred and discussed p. 431, *S. (S.) elegans* Poulsen p. 432 pl. iii figs. 19-21 [forms erroneously called holotype & paratypes], *S. (S.) expansa* sp. n. Ordovician (Lower) Canada (B.C.) p. 432 pl. iii figs. 6a-b, 7, *S. (S.)* cfr. *brevispicata* Hintze p. 433 pl. iii figs. 15-18, *S. (S.) uncaespicata* H. and *S. (S.) minima* Shaw so referred p. 431; *Symphysurina* a sp. pl. iii figs. 10-11, *S. b* sp. pl. iii figs. 12-14 p. 433; *Illaeonurus eurekaensis* Walcott and *Tsinania elongata* W. referred to *Symphysurina* [? subgen.] p. 430; *S. walcotti* Kindle 1929 may belong to *Bellefontia* p. 373, Kobayashi J. Fac. Sci. Tokyo Univ. [2] 9 1955.

? Symphysurina huentotiana sp. n. p. 2 [unillustr.] Cambrian (Upper) Argentina (Mendoza), Rusconi Bol. paleont. B. Aires No. 32 1955.

? Symphysurina huentotiana Rusc. illustrated p. 38 pl. iii fig. 8, Rusconi (5).

Symphysurina n. spp. a & b [undescribed] p. 12, *S. n. sp. c* [undescribed] p. 13, **Hintze** (1).

Symphysurina recorded p. 1544, **Durkee**.

Symphysurinella Raymond 1937 discussed p. 428, **Kobayashi** (1).

Symphysurininae subfam. n. [Asaphidae] for *Symphysurina* Ulrich 1924 p. 426, **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Symphysuroides Raymond 1937 may belong to Nileidae p. 193, **Hupé** (4).

Symphysuroides Raymond 1937 considered a subgenus of *Symphysurina* [quod vide] p. 428, **Kobayashi** (1).

Symphysurus palpebrosus Dalm. illustrations of Panderian organs text-figs. 1A, 4a, 6a, 7a-b, 8a, **Hupé** (1).

Synhomalonotid recorded p. 2, **Whittard**.

Synhomalonotus Pompeckj 1898 referred to Colpocoryphinae subfam. n. p. 225, **Hupé** (4).

Synhomalonotus murchisoni (Salter) recorded p. 17, **Whittard**.

Syspacephalus Resser 1936 discussed p. 6, **Rasetti**.

Syspaceilus Resser 1938 referred to Coosellidae fam. n., pygidia assigned by Resser 1938 and Lochman 1950 excluded (latter referred to Cedariidae), newly associated pygidia indistinguishable from those of *Coosella*, *S. cf. S. camurus* Lochman p. 734 pl. lxxviii figs. 8, 10, *S. dunoirensis* (Miller) p. 734 pl. lxxviii fig. 9, **Palmer** (1).

Taenicephalus cordillerensis listed p. 460, **Okulitch & Bell**.

Taitzia agave (Walcott) p. 428, **Lu**.

Taitzia liaotungensis sp. n. p. 92 pl. vii fig. 2, *T. glabella* sp. n. p. 93 pl. vii figs. 5-8, *T. granulata* sp. n. p. 93 pl. vii figs. 3-4 Cambrian (Middle) Manchuria, *T. insueta* Resser & Endo p. 44, **Endo** Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Taitzia liaotungensis Endo p. 110, **Endo** (2).

Tangshihella gen. n. [nondescr. 1953] [Conocoryphidae (Bailiellinae)] p. 111 for type *Bailiella ulrichi* Resser & Endo text-fig. 104 (7) drawing Cambrian Manchuria, **Hupé** Ann. Paléont. 41 1955.

Teinistion Monke 1903 discussed, *T. lansi* M. lectotype chosen, *T. monkei* sp. n. for *T. l. M. partim* (pl. 4 fig. 1) p. 93, *T. magna* sp. n. p. 92 pl. xiv fig. 12 Cambrian China (Shantung); *T. sulcatus* & *T. obtusus* Endo 1937 referred tentatively to *Dorypygella*, *T. sodeni* M. 1903 cranidia to *Blackwelderia ex. sinensis* (Bergeron) & pygidia to *B. paronai* (Airaghi) p. 93, **Kobayashi** Trans. palaeont. Soc. Japan NS No. 20 1955.

Teinistion lansiiforme [lanciiforme on pl. expl.] sp. n. p. 78 pl. vii figs. 9-11 Cambrian (Middle) Manchuria, *T. truncatus* Endo p. 11, *T. obtusus* E. p. 26, **Endo** Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Teinistion [sic] *alcon* (Walcott) p. 109, *T. truncatus* Endo, *T. lanciiforme* E. p. 110, **Endo** (2).

Telephus Barrande 1852 spp. discussed, *T. pacificus* sp. n. Ordovician (Middle) Canada (B.C.) p. 419 pl. ii figs. 9a-b, 10, **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Tellerina chinghsiensis (Sun) p. 429, **Lu**.

Tellerina orientalis Resser & Endo, *T. sulcatifera* E. p. 109, **Endo** (2).

Terranovella bristolensis Resser referred to *Raaschella* but specifically indeterminate p. 764, **Palmer** (1).

Terranovella gelasinata Shaw 1951 type of *Highgatella* gen. n., age stated to be Tremadoc [not Upper Cambrian] p. 187, **Shaw** (1).

Tesselacauda Ross 1951 referred tentatively to Protopliomeropsinae p. 245, **Hupé** (4).

Tesselacauda Ross 1951 referred to Pliomeridae, *T. flabella* sp. n. Ordovician (Lower) Canada (B.C.) p. 417 pl. ii figs. 8a-b, **Kobayashi** J. Fac. Sci. Tokyo Univ. [2] 9 1955.

Tesselaecauda Ross 1951 referred to Pilekiidae **fam. n. p. 43, Sdzuy.**

Thaleops ? punctatus (Roy 1941) for *Illaeus* p. R. refigured p. 140 pl. lxii figs. 28, 30, 31, **Whittington (1).**

Thysanopeltis see *Scutellum*.

Thysanopeltis speciosa (Corda) from Sahara p. 147 pl. xxi fig. 18, **Le Maitre (2).**

Tingocephalus Sun 1935 referred to Tingocephalinae, but affinities with Leioostegiidae or Damesellidae suggested p. 173, **Hupé (4).**

Toernquistia [emended from *Törnquistia*] Reed 1896 placed on Official List of Generic Names p. 247, **Opinion 367.**

Törnquistia Reed 1896 emended to *Toernquistia* [quod vide], **Opinion 367.**

Tostonia referred to Olenidae p. 462, **Kobayashi (1).**

Toxotididae **fam. n.** [Utioidea] for *Toxotis* and *Hysteroptera* p. 135, **Hupé Ann. Paléont. 41 1955.**

Toxotis Wallerius 1895 referred to Toxotididae **fam. n. p. 135, T. pusilla** W. text-fig. 135 (drawing), **Hupé (4).**

Trapelocera see *Acidaspis*.

Tretaspis nováki n. sp. [Chlupáč 1952] p. 4, **Röhlich & Chlupáč.**

Triangulaspis Lermontova 1940 discussed p. 16, *T. meglitzkii* (Toll) p. 17 pl. iii figs. 1, 1a; *Pagetia annio* Cobbold, *P. vigilans* Matthew & *Ptychoparia czekanovskii* T. also referred to *T.*, **Lermontova (1).**

Triangulaspis meglitzkii (Toll) table 1, **Zelenov, Zhuravleva & Korde.**

Triarthrinae see *Cyclognathina* **gen. n.**

Triarthrinae emend. Harrington & Leanza a synonym of Oleninae p. 462, **Kobayashi (1).**

Triarthrus ? eatoni p. 690, **Clark & Strachan.**

Triarthrus variscorum sp. n. p. 18 pl. iii figs. 71-76 (? 74) text-figs. 11a-e Ordovician (Tremadoc) Germany (Hof), **Sdzuy Abh. senckenb. naturf. Ges. No. 492 1955.**

Triarthrus ? (with endopodites) p. 19, **Sampelayo.**

Tricrepicephalidae **fam. n.** for *Tricrepicephalus* Kobayashi 1935 and *Meteoraspis* Resser 1935 p. 752, **Palmer J. Paleont. 28 6 1955.**

Tricrepicephalus Kobayashi 1935 discussed and referred to Tricrepicephalidae **fam. n. p. 754, T. coria** (Walcott) [may be a sp. group] with following spp. as synonyms *thoosa* (W.), *tumidus* (W.), *walcotti* (Lochman), *beltensis* Resser, *davidi* Lochman, *nasutus* Duncan, *rusticus* Kindle p. 755 pl. lxxxi figs. 1-4, 6, *T. texanus* (Shumard) with following spp. as synonyms *texanus danace* & *t. elongatus* (W.), *yellowstonensis* Resser, *cedarensis* R., *curticei* R., *laxus* R., *alabamensis* R., *simulans* R., *simplex* R., *blountensis* R., *natalia* Lochman, *rex* L., *auxiliaris* Duncan, *johnsoni* Kindle, *murphyi* K., *arcuatus* Tasch, & *Coosia ? pustulata* T. p. 755 pl. lxxxi fig. 9, *T. spp.* [pygidia] p. 756 pl. lxxxi figs. 5, 7, 8, *T. tripunctatus* (Whitfield) with synonym *T. magnispinus* (Walcott) p. 755; following spp. referred to *Meteoraspis*—*comus* (Walcott), *comus occidentalis* Lochman, *paracomus* (L.), *nuperus* Resser, *unicornis* Kindle p. 754, **Palmer (1).**

Tricrepicephalus anarusconii, *T. nahuelus*, *T. serranus* Rusc. spp. p. 9, **Rusconi (5).**

Tricrepicephalus recorded p. 1544, **Durkee.**

Trigonocerca ? n. sp. a [undeser.] p. 17, **Hintze (1).**

Trigryops Kobayashi 1940 *pars* referred to Trigryopsidae **fam. n.** p. 261, *T. kobayashii* nov. spec [nom. nud.] (= *T. atra* Kobayashi) expl. text-fig. 245 (3), **Hupé (4).**

Trigryopsidae **fam. n.** [Trinucleoidae] for *Trigryops* p. 261, **Hupé Ann. Paléont. 41 1955.**

"*Trilobites corpulentus*" Barrande 1868 p. 41 pl. v figs. 41-43, **Sdzuy.**

Trilobites spp. V., X., Z. Barrande 1868 tentatively referred to *Niobe* (*Niobella*) *innotata* (B. 1868) p. 22, *T. sp. Y.* referred tentatively to *Pharostomina ferentaria* **gen. et sp. n. p. 33, Sdzuy.**

Trimerocephalus see *Phacopid*.

Trimerocephalus see *Phacops*.

Trinodus M'Coy 1846—doubtful whether *Girvanagnostus* can be maintained as a subgenus p. 7, **Whittard**.

Trinodus priscus sp. n. Ordovician (Lower) p. 476 pl. vii fig. 6, *T. tardiformis* sp. n. Ordovician (Middle) Canada (B.C.) p. 476 pl. vii figs. 7a–b, **Kobayashi J. Fac. Sci. Tokyo Univ.** [2] 9 1955.

Trinodus sp. p. 11, **JAANUSSON** in **Jaanusson & Mutvei**.

Trinucleidae see *Myttonia*, *Bergamia*, *Stapeleyella* & *Incaia* **genn. n.**

Trinucleoidae taken to include Ithyophoridae, Trigryopsidae **fam. n.**, Orometopidae **fam. n.**, Raphiophoridae, Selenecemidae, Endymioniidae, Dionididae and Trinucleidae p. 259, **Hupé (4)**.

Trinucleoides reussi (Barr.) p. 212, **Havlíček & Šnajdr**.

"*Trinucleus*" *nordenskioldi* **Bulman** 1931 type of *Incaia* **gen. n.** p. 32; *T. gibbsi* **Salter** and provisionally *T. sedgwicki* **S., T. etheridgei** **Hicks** [may be better considered **nom. dub.** p. 35] & *T. hibernicus* **Reed** referred to *Bergamia* **gen. n.** [quod vide], *T. kreugeri* **Hoek** also discussed in this connection; *T. munchisoni* **Salter** referred to *Stapeleyella* **gen. n.** and some records to *S. inconstans* **sp. n.** [quod vide] with *T. gibbsii* of **La Touche** 1884 (refigured); *T. boliviensis* **Lake** and *T. primitivus* **Born** discussed p. 31, **Whittard**.

Trinucleus sp. of **Elles** 1922 (p. 145) referred to *Salterolithus* cf. *harnagensis* p. 420, **Whittington (2)**.

Triplagnostus see *Ptychagnostus*.

Trochurus heteroclyta (Barr.) p. 360, *T. speciosus* **Beyr.** p. 377, **Horný**.

Tropidocoryphe latens (Barr.), *T. memnon* (H. & C.) listed p. 154, **Chlupáč (2)**.

Tropydopyge [sic] **Harrington & Kay** 1951 referred tentatively to *Paracoosinae* p. 37, **Sdzuy**.

Tsinania canens (Walcott) listed—*T. vulgaris* **Resser & Endo** and tentatively *T. longicephala* **R. & E.** 1937 *partim* (pl. 55 figs. 23–26 pygidia) considered synonymous p. 95, **Endo (1)**.

Tsinania canens **Walcott**, *T. longicephala* **Resser & Endo** p. 109, **Endo (2)**.

Tsinania elongata **Walcott** referred to *Symphysurina* p. 430, **Kobayashi (1)**.

Tungtzella **Sheng** 1934 referred to *Taihungshaninae* p. 194, **Hupé (4)**.

Ucebia **Walcott** 1924 accepted as a subgenus of *Kingstonia* **W.** [quod vide] p. 725, **Palmer (1)**.

Unguliproetus see *Proetus*.

Unguliproetus **Erben** 1951 an independent genus of *Proetinae* p. 181, **Hupé (4)**.

Utidae — affinities of *Distazeris* discussed p. 131, **Hupé (4)**.

Utioidea — see *Paracedariidae* **nom. n.**, *Shumardiidae*, *Myindidae*, & *Toxotidae* **fam. n.**

Vermilionites **gen. n.** [**Elviniinae**] p. 452 for type *V. bisulcatus* **sp. n.** Ordovician (Lower) Canada (B.C.) p. 453 pl. vi fig. 4, pl. ix fig. 2 (drawing), **Kobayashi J. Fac. Sci. Tokyo Univ.** [2] 9 1955.

Vidria **Weller** 1944 probably a synonym of *Paladin* **W.** 1936 p. 409, **Příbýl**.

Waribole see *Cyrtosymbole*.

Waribole see *Piltonia* **gen. n.**

Weberides **Reed** 1942 placed on Official List of Generic Names with type *Phillipsia mucronata* **M'Coy** 1844, **Opinion 352**.

Weberides **Reed** 1942 a synonym of *Paladin* **Weller** 1936 p. 409, **Příbýl**.

Weeksina rara **Lochman** see *Genus* and *species undet.* 3.

Whitfieldina **Resser** 1937 a synonym of *Norwoodia* **Walcott** 1916 p. 743, **Palmer (1)**.

Wutingia rectangulosa [sic] **Endo** p. 108, **Endo (2)**.

Xenostegium Walcott 1924 discussed & referred to Ogygiocarinae p. 439, *X. euclides* W. 1925 with synonym *X. albertensis* W. referred tentatively to *Kayseraspis* p. 442, **Kobayashi** (1).

Xenostegium sp. A [undescribed] p. 12, **Hintze** (1).

Xiphogonium lovéni (Barr.) p. 219, **Svoboda & Prantl** (1).

Xiphogonium lovéni (Barr.) p. 389, **Svoboda & Prantl** (2).

Yabeia laevigata Resser & Endo p. 43, **Endo** (1).

Yanquetruzia gen. n. [no family assigned], *Y. chupina* sp. n. p. 3 [unillustrated] Cambrian (Middle) Argentina (Mendoza), **Rusconi** Bol. paleont. B. Aires No. 32 1955.

Yanquetruzia chupina Rusco. illustrated p. 19 pl. i fig. 17, *Y. cruzata* [curvata on pl. expl.] sp. n. p. 19 pl. i fig. 3 Cambrian (Middle) Argentina (Mendoza), **Rusconi** Rev. Mus. Hist. nat. Mendoza 8 1-4 1955.

Yokusenian manhoukuensis [manchuriensis on pl. expl.] sp. n. p. 76 pl. ix figs. 1-3, *Y. conica* sp. n. p. 76 pl. viii figs. 7-8, *Y. granulosa* sp. n. p. 77 pl. viii fig. 19 Cambrian (Upper) Manchuria, **Endo** Bull. cent. nat. Mus. Manchoukuo No. 7 1944.

Yoyarria gen. n. [no family assigned], *Y. puelchana* sp. n. p. 1 [unillustrated] Ordovician Argentina (Mendoza), **Rusconi** Bol. paleont. B. Aires No. 32 1955.

Yoyarria puelchana Rusco. illustrated p. 60 pl. iv fig. 13, **Rusconi** (5).

Yudomia [recte *Judomia*] *dzevanovskii* Lerm. table 1, **Zelenov, Zhuravleva & Korde**.

Zacanthoides cf. *Z. cnopus* Walcott [sic] p. 1393, **McMannis**.

Zacanthoides ferula Leanza p. 8, **Rusconi** (5).

Zacanthopsis virginica Resser listed p. 3, **Rasetti**.

Zacanthopsis sp. indet. p. 803 pl. lxxiv figs. 5-8, **Shaw** (2).

Cranidium [undet. genus and species D] of Ross 1951 (pl. 35 figs. 1-2) may belong to Shumardiidae p. 472, **Kobayashi** (1).

Fragments of trilobites Cambrian U.S.A. (N. Mexico) p. 36, **Kelley & Silver**.

Gen. et sp. indet. (*Jakutus* ? sp.) see *Jakutus*.

Gen. et sp. indet. [undescribed] pl. xii fig. 6, **Lermontova** (1).

Gen. et spec. indet. I p. 19 pl. ii fig. 8, Gen. et spec. indet. II p. 20 pl. ii fig. 9 Cambrian (Lower) Spitzbergen, **Winsnes**.

Gen. et spp. indet. (free cheeks) [undescribed] p. 365 pl. viii fig. 7, another p. 366 pl. viii fig. 16 Ordovician (Lower) Canada (B.C.), **Kobayashi** (1).

Gen. ind. p. 10 Ordovician Argentina, **Rusconi** (5).

Genus and species undet. 1 [affinities with *Bynumia metisensis* Rasetti] Cambrian (Upper) U.S.A. (Texas) p. 765 pl. lxxxvii fig. 9, **Palmer** (1).

Genus and species undet. 2 [affinities with *Holcacephalus*] Cambrian (Upper) U.S.A. (Texas) p. 765 pl. lxxxvii fig. 10, **Palmer** (1).

Genus and species undet. 3 [affinities with *Weeksina rara* Lochman] Cambrian (Upper) U.S.A. (Texas) p. 765 pl. lxxxvii fig. 7, **Palmer** (1).

Genus et species indeterminata 1 p. 22 pl. v figs. 12-13, Gen. et sp. ind. 2 [undescribed] pl. v fig. 14, Gen. et sp. ind. (hypostomes) [undescribed] pl. iii figs. 11-12 Cambrian (Upper) U.S.S.R. (Kazakhstan), **Lermontova** (3).

Hypostome of Barrande 1868 fig. 52 referred to *Niobe* (*Niobella*) *innodata* B. p. 22, **Sdzuy**.

N. gen. [undescribed] aff. *Plethopeltis* pl. xiv (table), **Cloud & Barnes**.

N. gen. *P* [undescr.] n. spp.
a, b, c [undescr.] p. 19, **Hintze** (1).

Pygidium [genus and species undetermined] Ross 1951 (pl. 19 figs. 6, 11, 15) may belong to *Parahystricurus carinatus* p. 456, **Kobayashi** (1).

Trilobite [undet.] fauna from Venezuela, **Rod.**

Trilobite fragments p. 523 ff., **Lindström.**

Trilobite fragments p. 361, **Scholten et al.**

? Trilobite fragments text-figs. 89 (1-4), **Hundt.**

Trilobites pp. 2241, 2247, **Dott.**

Trilobites (with exopodites) p. 19, **Sampelayo.**

Undescribed genus n. sp. [undescr.] p. 1515, **Wilson** (1).

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II. TRILOBITA

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CONTENTS

	PAGE
I. TITLES	1
II. SUBJECT INDEX	12
III. SYSTEMATIC INDEX	19

I.—TITLES

The year of publication has been omitted where it is the same as the volume year of the "Record", namely (1956).

Declaration 20. Clarification of the status of a family-group name where the name of the type genus of the taxon so named is suppressed under the Plenary Powers. Opin. int. Comm. zool. Nom. 10 19 1955 : iii-vii.

Declaration 21. Clarification of the interpretation of Article 30 of the *Règles* regarding the specific name to be accepted as the name for the type species of a genus where that species has two or more objectively synonymous such names. Opin. int. Comm. zool. Nom. 12 11 : iii-viii.

Declaration 22. Clarification of Rule (a) of Article 30 in relation to the status thereunder of a designation of a type species for a genus made at the time of the publication of the generic name concerned when that designation or some part is ambiguous or is qualified by a mark of interrogation. Opin. int. Comm. zool. Nom. 12 12 : xi-xviii.

Declaration 23. Clarification of the status under the Law of Homonymy of each of three pairs of specific names based, in the case of the names comprised in each pair,

upon the same geographical term and differing from one another only in spelling. Opin. int. Comm. zool. Nom. 13 2 : iii-xvi.

Declaration 24. Clarification of the status under Article 25 of the *Règles* of a name for a taxon published conditionally and matters incidental thereto. Opin. int. Comm. zool. Nom. 13 18 : xix-xxvi.

Declaration 25. Clarification of Rule (g) in Article 30 in relation to the selection of the type species of a genus in a case where the nominal species so selected, though not itself cited at the time of establishment of the genus in question, is objectively identical with another nominal species which was so cited. Opin. int. Comm. zool. Nom. 13 19 : xxix-xxxvi.

Declaration 26. Clarification of the expression "monotypical genus" for the purposes of Rule (c) in Article 30 of the *Règles*. Opin. int. Comm. zool. Nom. 13 20 : xxxix-l.

Declaration 27. Clarification of the question of the species to be accepted under Rule (f) in Article 30 as the type species of a nominal genus established as a substitute for a previously established such genus but with a designated type species different from that of the nominal genus so replaced. Opin. int. Comm. zool. Nom. 14 19 : iii-x.

Declaration 28. Clarification of the status of a name given to a family-group taxon based upon a misidentified type genus. *Opin. int. Comm. zool. Nom.* **14** 20 : xiii-xxiv.

Declaration 29. Introduction and definition of the expression "Linnean tautonymy" in relation to the determination of the type species of a nominal genus under Rule (d) in Article 30. *Opin. int. Comm. zool. Nom.* **14** 22 : xxvii-xxxii.

Direction 41. Addition to the *Official List of Family-Group Names in Zoology* or, as the case may be, to the *Official Index of Rejected and Invalid Family-Group Names in Zoology* of the family-group names involved in Volume 11 of the *Opinions and Declarations rendered by the International Commission on Zoological Nomenclature*. . . *Opin. int. Comm. zool. Nom.* **11** 30 : 433-452.

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Banks, M. R. The Middle and Upper Cambrian Series (Dundas Group and Its Correlates) in Tasmania, in J. Rodgers [ed.], *Symposium sobre el Sistema Cámbrico, su paleogeografía y el problema de su base Part II.* XX Congr. geol. int. Mexico 1956 : 165-212 text-figs. 1-5. [Trilobita det. A. A. Öpik.]

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Librovitch, L. see Weber, V. N.

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Lochman, C. *see* Bridge, J.

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Öpik, A. A. *see* Banks, M. R.

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II.—SUBJECT INDEX

GENERAL LITERATURE AND HISTORY

Nomenclature (principles of). — Declarations 20-29; Discussion of question whether a non-typical subspecies can be validly chosen as type of a genus, Richter & Schmidt.

Additions to Official Lists.—Phillipsiidae Oehlert 1886, Toernquistiidae Hupé 1953, Direction 41.

General works.—Organisation and affinities of trilobites, Rusconi (2); Statistical methods applied to trilobites with examples, Shaw (4); Trails and habits of trilobites, Seilacher; Stratigraphical correlation, Moore.

Popular work.—Gerard.

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Abstracts. — Fisher (1), Flower.

Check List. — Estonian Middle Ordovician trilobites, Rõõmusoks (2).

Laboratory techniques. — Photography, Whittington (4).

Museum Collections. — Types etc. from Tortworth (Western England), Curtis; Type material of Schlotheim 1820 lost, Jaanusson (3).

Revision of nomenclature.—Proposed protection of *Encrinurus* Emmerich 1844 and *Odontochile* Hawle & Corda 1847 by suppressing *Trilobus punctatus* Brünnich 1781, Tripp & Whittard; Proposed protection of *Protopeltura* Brögger 1882, Henningsmoen (2); Proposed suppression of *Acanthaloma* Conrad 1840 in order to protect *Leonaspis* R. & E. Richter

1917, **Whittington (8)**; Proposed suppression of *Asaphus* Brongniart 1817 [in favour of *Asaphus* B. 1822] and of *A. cornigerus* Schlottheim 1820, **Jaanusson (3)**; Proposed suppression of *Cryptonymus* Eichwald 1825 (non 1840), *Cryptonymus* E. 1840 considered invalid, **Jaanusson (2)**; Support for proposal to suppress *Phillipsella* Oehlert in favour of *Phillipsinella* Novák 1886, **Stubblefield (1)**; Proposed validation or protection of *Paradoxides* Brongniart 1822, *Olenus* Dalman 1827 and *Parabolina* Salter 1849; proposed suppression of *Entomolithus* Linnaeus 1759 and *Entomotrachites* Wahlenberg 1821, **Poulsen (1)**; Proposed validation of the emendation of *Peltoura* Milne Edwards 1840 to *Peltura*, **Stubblefield (5)**; Proposed validation of *Sao* Barrande 1846 and of *Ellipsocephalus* [as emended by Emmrich 1839 from *Elleipsocephalus*] Zenker 1833; *Monadina* B. 1846 a contemporaneous subjective synonym of *Sao* B. 1846 (which is given precedence), *Staurogmus* Corda 1847 a junior objective synonym of *Sao*, **Poulsen (2)**; Proposed validation of *Trinucleus* Murchison 1839 (by suppression of *Trinucleus* Link 1807) and *Tretaspis* McCoy 1849 (by suppression of *Tretaspis* Murchison 1839); *Edgellia* Shaw 1950 an objective synonym of *Trinucleus* Murchison 1839, **Stubblefield & Whittington**; *Megalaspis* Angelin 1851 non Bleeker 1851 renamed *Megistaspis*, **Jaanusson (5)**; *Wutingia* Endo 1935 non Melichar 1926 renamed *Endoaspis*; *Camaraspididae* a synonym of *Pteroccephaliidae*, *Parabriscoia* Kobayashi 1935 of *Elkia* Walcott 1925, **Lochman (1)**; *Bronteus radiatus* Weber 1932 (non Münster) stated to have been renamed by W. B. *sidereus*, **Chernysheva (1)**; *Aeonia* Burmeister 1843 an objective and *Gerastos* Goldfuss 1843 a subjective synonym of *Proetus* Steinger 1831, **R. & E. Richter (2)**; *Edgellia* Shaw 1950 an objective synonym of *Trinucleus* Murchison 1839, **Whittard**; *Blountina* Lochman 1944 and *Protillaenus* Raymond 1937 subjective synonyms of *Maryvillia* Walcott 1916; many of Resser's 1942 spp. of *M.* considered synonyms, **Rasetti (1)**; *Clappaspis* Deiss a subjective synonym of *Lyriaspis* White-

house, **Öpik (3)**; *Crotalurus* Volborth 1858 a synonym of *Celmus* Angelin 1854, **Jaanusson (4)**; *Dicranactis* Corda 1847 a synonym of *Scutellum* Pusch 1833, *Holomeris* C. 1847 of *S. (Paralejurus)* C. 1847, **R. & E. Richter (1)**; *Drummuckaspis* Prantl & Příbyl 1949 a synonym of *Proceratocephala* P. & P. 1949, **Whittington (3)**; *Euplethagnostus* Lermontova 1940, *Plethagnostus* Clark 1923, *Pseudorhaptagnostus* L. 1940 [sic] & *Rhaptagnostus* Whitehouse 1936 all synonyms of *Pseudagnostus* Jaekel 1909, *Lopnorites* Troedsson 1937 of *Proceratopyge* Wallerius 1895, **Ivshin**; *Hamptonella* Resser 1937 a synonym of *Kochiella* Poulsen [1927], **Lochman (2)**; *Mesodema* Whitehouse 1939, *Neoredlichia* Saito 1936, *Redlichops* R. & E. Richter 1941, *Archaeops*, *Kuanyangia*, *Latiredlichia*, *Pararedlichia*, *Pareops* and *Saukiandops* Hupé 1953 all considered synonyms of *Redlichia* Cossmann 1902, **Schindewolf (2)**; *Modocia* [Walcott 1924] probably a synonym of *Armonia* W. 1924, C. **Lochman** in **Wilson**; *Pteroccephalina* Resser 1938 a synonym of *Litocephalus* R. 1937, **Palmer (2)**; *Semnocephalus* Resser 1942 a synonym of *Modocia* Walcott 1924, **Shaw (3)**; *Stoermeraspis* Prantl & Příbyl 1947 a synonym of *Octobronteus* Weber 1945, **R. & E. Richter (3)**.

Designation of type species. — *Asaphus* Brongniart 1822—proposed designation of *Entomotrachites expansus* Wahlenberg 1821, **Jaanusson (3)**; *Dicranactis* Corda 1847—designation of *Bronteus gigas* C. 1847, *Holomeris* C. 1847—designation of *B. aulicus* C. 1847, **R. & E. Richter (1)**; *Encrinurus* Emmrich 1844—proposed designation of *Entomotrachites punctatus* Wahlenberg 1821 (non Brünnich 1781); *Odontochile* Hawle & Corda 1847—proposed designation of *Asaphus hausmanni* Brongniart 1822, **Tripp & Whittard**; *Olenus* Dalman 1827—proposed designation of *Entomotrachites gibbosus* Wahlenberg 1821, **Poulsen (1)**; *Paramegalaspis* Thorall 1935—designation of *Megalaspis (P.) immarginata* T. 1935, **Jaanusson (5)**; *Protopeltura* Brögger 1882—proposed designation of *Peltura praecursor* Westergaard 1909, **Henningsmoen (2)**; *Ptychopyge*

Angelin 1854—proposed designation of *Asaphus angustifrons* Dalman 1827, Jaanusson (1).

Selection of lectotypes.—*Actinopeltis completa* (Barrande 1872), *Cekovia transfuga* (B. 1852), *Dalmanitina proaeva socialis* (B. 1846), *Eccoptochile* (E.) *clavigera* (Beyrich 1845), *E. (Eccoptochiloides) tumescens* (Barr. 1852), *Kloucekia phillipsi* (B. 1846), *Pharostoma pulchrum* (B. 1846), *Placoparia grandis* Hawle & Corda 1847, *Pseudobasilicus ingens* (B. 1852), *Stenopareia panderi* (B. 1852), *Zbirovia arata* (B. 1872), *Zeliszkeella hawlei* (B. 1846), Šnajdr; *Ampyx obtusus* Moberg & Segerberg 1906, *Euloma laeve* Angelin 1854, *Megalaspides dalecarlicus* (Holm 1882), M. (Lannacus) *nericiensis* Wiman 1905, *Niobe emarginula* A. 1851, *Niobella obsoleta* (Linnarsson 1869), *Promegalaspides (Borogothus) intactus* (M. & S. 1906), *Varvia breviceps* (A. 1854), Tjernvik; *Asaphus expansus* (Wahlenberg 1821), Jaanusson (3); *Bristolia bristolensis* (Resser), *Fremontella halli* (Walcott), *Fremontia canadensis* & *F. fremonti* (W.), *Olenellus argentus* W., Harrington; *Bronteus canaliculatus*, B. *intermedius* Goldfuss 1843 spp., *Scutellum* (S.) *alutaceum* (G. 1843), *S. (Scabriscutellum) alternans* (Roemer 1855), *S. (Scab.) insignitum* (Beyrich 1846), *S. (Scab.) minus* (R. 1850), *S. (Scab.) scabrum* (G. 1843), R. & E. Richter (1); *Celmus granulatus* Angelin 1854, Jaanusson (4); *Dudleyaspis quinquespinosa* (Lake 1896), *Proceratocephala terribilis* (Reed 1914), Whittington (3); *Encrinurus punctatus* (Wahlenberg 1821), Tripp & Whittard; *Gerastos granulosis* Goldfuss 1843, R. & E. Richter (2); *Isocolus sjögreni* Angelin, *Cyphoniscus socialis* Salter, Whittington (5); *Isoteloides whitfieldi* Raymond 1910, Hintze & Jaanusson; *Megistaspis (Megistaspidella) extenuata* (Wahlenberg 1821), Jaanusson (5); *Olenaspella evansi* (Kobayashi), Wilson; *Paradoxides paradoxissimus* (Wahlenberg 1821), Poulsen (1); *Trinucleus fimbriatus* Murchison 1839, Stubblefield & Whittington; *Wutingia rectangulosa* Endo 1935, Kobayashi (1).

Selection of neotype.—*Proetus* (P.) *cuvieri* Steininger 1831, R. & E. Richter (2).

STRUCTURE

Terminology. — *Rachis* preferred to *axis*, and *dorsal furrows* to *axial furrows*; glabellar furrows and lobes lettered S & L and numbered from back to front; introduction of terms *eu-ptychopariid* and *steno-ptychopariid* for respectively broad (tr.) and narrow rostral plates, Jaanusson (4); *Metagenal spines* proposed to replace *intergenal spines*, Harrington; *False pre-glabellar furrows* in *Enerinurinae*, Temple (1); Introduction for *Odontopleuridae* of terms *antennular notch*, *major pygidial spine*, *pleural ridge* (of pygidium); notation for cephalic spines, Whittington (1).

Segmentation. — Concluded that joint between cephalon and protopygidium of young *Odontopleuridae* is a primary (not an oblique secondary) segmental division, Whittington (1).

Glabella. — Development of frontal lobe analysed in *Cheiruracea* and *Phacopacea*, incorporation of part of anterior border in *Enerinurinae*, Temple (1); In adult *Protolloydolites* there is a prefrontal lobe separated from rest of glabella by a shallow furrow, Whittard.

Facial sutures. — Considered opisthoparian in *Celmus*, Jaanusson (4); In protaspis of *Diacanthaspis* suture is proparian, but rapidly becomes opisthoparian during early meraspid stages (by sudden loss of the fixigenal spines), Whittington (1); Supposed anterior branch of suture described by Lamont 1948 in *Trinucleus fimbriatus* may be a crack, Whittard.

Eyes.—Progressive decrease in distance between anterior ends of eyes in Swedish Lower Ordovician *Cyclopyge*, Tjernvik; Considered not to be functional in *Isocolidae*, Whittington (5).

Anterior pits.—Position analysed in *Cheiruracea* and *Phacopacea*, Temple (1).

Cephalic spines. — Fixigenal spine of *Odontopleurid* protaspis referred to occipital segment and considered homologous with posterior pleural

spine of thoracic segments; fixigenal spine disappears very rapidly during development, **Whittington (1)**; Sub-anterior position of genal spines in some Olenellidae discussed and considered a specialised polyphyletic condition, **Harrington**.

Hypostome. — Circular hole through doublure of hypostome in several Odontopleurids; orientation and attachment of hypostome in this family discussed, **Whittington (1)**; Separation of *Cornuproetus* from *Proetus* is supported by difference in the hypostomes, **R. & E. Richter (2)**.

Thoracic segments. — In *Proetus*, *Cornuproetus* and *Dechenella* the axial ring ("Annulus") of each thoracic segment (and of the first pygidial segment) is divided by a transverse furrow ("Intraannular-Furche") into an anterior "Präannulus" and a posterior "Postannulus", but there is no trace of this subdivision on the ventral surface of axial ring, **R. & E. Richter (2)**; Disposition of posterior pleural spines of the foremost thoracic segments of Odontopleuridae is determined by the position of the librigenal spines (and is therefore of little taxonomic value), **Whittington (1)**.

Pygidium. — Barrande's interpretation of the pygidial ribs of Scutellidae as complete pleurae (not half pleurae) upheld, **R. & E. Richter (1)**; Further support for Barrande's interpretation drawn from a pygidium of *Scutellum* (*Thysanopeltis speciosum*), **R. & E. Richter (3)**.

Pygidial spines. — Paired marginal spines considered homeomorphic features, **Lochman (1)**; Within *Scutellum* (*Thysanopeltis*) a morphological series is recognised from forms with very many fringing spines (*meridionalis*) to those with only a single spine for each pygidial rib (*clementinum*), **R. & E. Richter (3)**.

Integument. — The hard integument is an integral part of the organisation of the trilobites, **Schindewolf (1)**.

Composition of integument. — Determination of the amounts of various alkali elements (Li, Na, Rb,

Cs) in several trilobites, showing significant enrichment in Cs compared with enclosing matrix, **McKerrow et al. (2)**.

Ornamentation. — Prevalence of reticulation in Lower Cambrian assemblages, **Lochman (2)**.

Spines. — In some Odontopleurids tips of spines may bear several minute openings, **Whittington (1)**.

Tubercles. — In some Odontopleurids the median tubercle on the occipital ring bears four pits forming a square and rarely a fifth central pit, **Whittington (1)**.

Appendages. — Recorded in *Vinikainella*, **Rusconi (2)**; Suggested that antennules passed forward through antennular notches on the anterior cephalic border of Odontopleurids, **Whittington (1)**.

Musculature. — Thoracic musculature discussed, **R. & E. Richter (2)**.

PHYSIOLOGY AND SEX

Enrolment. — Suggested function of articulating furrows (on thoracic axial rings) as buttresses during dorsal flexing of thorax; in *Proetus* the intra-annular furrows may act as further buttresses, **R. & E. Richter (2)**.

Sexual dimorphism. — Possible example in *Redlichia noetlingi* (forms with long or short librigenal spines), **Schindewolf (2)**; Significant differences in cephalic measurements between vars. *typica* and *brevis* of *Geragnostus bisectus* interpreted as sex differences, **Shaw (4)**.

DEVELOPMENT

Ontogeny. — Development described in several Odontopleurids; metaprotaspis of *Diacanthaspis* has long fixigenal spines, proparian facial sutures, separate rostral plate, eyes far forward on cheeks, occipital spine, three (only) pairs of spines on glabella and one pair on anterior border of cephalon, **Whittington (1)**; Redescription as a Phacopid of the protaspis attributed by Beecher to *Acidaspis*, showing the existence of

small conjoined free cheeks; doubt cast on Temple's interpretation of the anterior glabellar furrows of *Dalmanitina*, Whittington (2); Reaffirmation of this interpretation, Temple (2); Lichid protaspis (that ascribed to *Arges consanguineus* by Beecher) redescribed and interpreted as showing faceted eyes, opisthoparian facial sutures, rostral plate, and cephalic doublure with terraced lines, Whittington (6); Cephalic ontogeny of *Calodiscus lobatus* with changes in glabellar shape; immature individuals of various spp. figured, Lochman (2); Meraspid pygidium of *Scutellum* described, R. & E. Richter (3); Young forms of *Protolloydolithus* described with eye-ridges and ocelli which are lost in adult, Whittard; Growth-series (cephala) of several Protenelids described, Suvorova (1).

Growth. — Discussion of place of origin of new segments during development, the pre-caudal hypothesis (segments originating at the junction of thorax and pygidium and passing both forwards into the thorax and backwards into the pygidium) being preferred to the pre-anal hypothesis (segments originating in front of the anal region and passing forwards through a transitory pygidium to be liberated into the thorax), R. & E. Richter (3).

Ecdysis. — Possible moulting condition in *Dalmanitina*, Whittington (2).

EVOLUTION AND CLASSIFICATION

General works (theories).—Odontopleurid ontogenies held to illustrate von Baer's laws, but not to support recapitulation or paedogenesis, Whittington (1).

Phylogeny. — Discussion of several U. Cambrian and L. Ordovician families which are considered monophyletic assemblages derived in most cases from generalised ptychopariid ancestors, Lochman (1); Asaphiscidae and Crepiccephalidae considered related and both descended from Ptychopariids, Rasetti (1); Suggested neotenus origin of Cheiruracea and Phacopacea from Ptychopariacea, Temple (1); Rela-

tions within Scutelluidae, family being considered closely related to Illaenidae, R. & E. Richter (1); *Isotelus*-group probably arose from *Megistaspis*-group, Jaanusson (5); Damesellidae, Kobayashi (1); Odontopleuridae, Whittington (1).

Evolutionary trends. — Doubt cast on Williams' 1948 interpretation of the inflation of the fringe in *Marroolithus* as a progressive evolutionary trend, Whittard.

Postulated lineages. — Re-presentation of Kaufmann's 1933 data on lineages in *Olenus*, Simpson; Suggested lines of descent in *Diacanthaspis*, Whittington (1).

Biometry. — General discussion; relative growth of two characters y and x in trilobites is usually rectilinear (not allometric) and of the form $y = a + bx$ where $a \neq 0$, hence ratios y/x are inconstant and should not be used; use of regression line advocated to obtain a and b , Shaw (4); Linear relations between various cranial measurements in *Modocia*, measurements used to separate type sp. from two others which are synonymized, Shaw (3); Triangular graphs used for comparing cranial proportions of Odontopleurids, Whittington (1).

Classification (principles of). — Principles of odontopleurid classification discussed: form of hypostome, glabellar lobes, position of eyes, etc. considered most important; cephalic and thoracic spines of less importance, Whittington (1); Forked hypostomes are developed independently in several unrelated Asaphids and cannot be used for classifying the group, Jaanusson (5); Differences in ventral cephalic sutures (levisellid as compared with steno-ptychopariid) *inter alia* held to justify separation of Mesotaphraspidinae from Dimeropyginae, Jaanusson (4); New genus *Varvia* referred tentatively to Asaphidae on basis of median suture on cephalic doublure although genus otherwise resembles *Symphysurus*, Tjernvik; Presence of fringing pygidial spines not by itself sufficient to define *Scutellum* (*Thysanopeltis*) as such spines are possible in other subgenera of *S.*; number of pygidial

pleural ribs as a generic criterion in Scutelluidae, **R. & E. Richter** (1); Usage of Bancroft followed in recognising new genera (rather than subgenera) among Shropshire Trinucleids, **Whittard**.

Classification. — Odontopleuridae classified into Odontopleurinae, Apianurinae, Miraspiniae, Selenopeltinae, **Whittington** (1).

ECOLOGY AND HABITS

Ecology. — Atlantic province fauna of Lower Cambrian interpreted as a deep-water off-shore assemblage, that of Pacific province as shallow-water coastal assemblage; suggested that *Elliptocephala asaphoides* fauna with elements from both provinces inhabited a deep basin on the coastal shelf, **Lochman** (2).

Habits. — Of Odontopleurids discussed, **Whittington** (1); Suggested adaptation of Odontopleurids to a resting position on sea floor, **Whittington** (3); Description and analysis of various trace-fossils ascribed to the actions of trilobites: crawling and grazing (forwards, obliquely, or sideways) as in *Diplichnites*, *Protichnites* and *Dimorphichnus*, burrowing on mud (in shallow pits or deeper burrows, or ploughing forwards) as in *Rusophycus*, *Cruziana* and *Crossochorda*; trails in L. Cambrian of Salt Range are referred to *Redlichia* (mud dweller) and Ptychopariidae (loose-sand dwellers), **Seilacher**; Bilobite markings as trilobite trails, **Lessertisseur** (1); *Cruziana* as moulds of trilobite burrows, **Lessertisseur** (2).

Migration. — Discussion of Cambrian faunal provinces, **Öpik** (4), **Kobayashi** (3); In the Cambrian faunas of Queensland there are endemic, Oriental, Pacific, and Atlantic elements, **Öpik** (2); Lower Cambrian *Elliptocephala asaphoides* fauna of New York contains a mixed assemblage of Atlantic and Pacific province forms, and permits correlation between deposits of the two provinces, **Lochman** (2); Sequence of trilobite faunas in Dresbachian and Franconian of N. America is affected by three major biofacies-changes (at the beginnings of *Aphelaspis*; *Conas-*

pis and *Ptychaspis* zones); revised correlation of N. American and N.W. European Cambrian successions equates the Dresbachian with the *S. brachymetopa* and *L. laevigata* zones, and the Franconian and Trempealeuan with the *Olenus* series 1-6, **Lochman** (1); Atlantic province elements in Upper Cambrian faunas of Nevada, **Palmer** (3); European-type Upper Ordovician fauna in Morocco, **Choubert et al.**

Teratology. — Abnormal pygidia in *Calipernurus insolitus* (forming 15% of known specimens), damaged cheek in *Diacanthaspis scitulus*, loss of fixigenal spine on one side (possibly by accidental breakage) in some small cranidia of *Apianurus barbatus*, **Whittington** (1); Damaged pleural lobes of pygidia in *Niobina* sp. and *Megalaspides nericiensis*, **Tjernvik**; Damaged pygidium in *Dalmanitina*, **Šnajdr**.

DISTRIBUTION AND FAUNAS

Cambrian. — Argentina, **Rusconi** (2); Argentina (Mendoza), **Rusconi** (3), (4); Australia, **Öpik** (4); Australia (Northern Territory), **Casey & Gilbert-Tomlinson**; Australia (Northern Territory, Tasmania, W. Australia), **Öpik** (3); Australia (Northwest), **Traves** (1), (2); Australia (South Australia), **Daily**; Australia (Victoria), **Thomas & Singleton**; Britain, **Stubblefield** (9); Canada (Eastern), **Hutchinson**; Canada (Western), **Rasetti** (2); Canada (Western), Alaska, **Okulitch**; China (An-hwei), **P'an**; China (Kwei-chow), **Lu** (2); France (Languedoc), **Gèze**; Greenland (E. & N.W.), Scotland, **Spitzbergen**, **Poulsen** (6); Greenland (N.) and Ellesmere I., **Troelsen**; Indochina, **Fromaget**, **Saurin**; Korea, **Kobayashi** (3); Manchuria, **Endo**; New Zealand, **Benson**; Norway, **Henningsmoen** (3); Poland, **Samsonowicz**; Portugal, **Teixeira**; Sahara and W. Africa, **Furon**; Tasmania, **Banks**; U.S.A. (Appalachians), **Rodgers** (1); U.S.A. (Great Basin), **Palmer** (3); U.S.A. (Nevada), **Nolan et al.**; U.S.A. (N.Y.), **Fisher** (2); U.S.A. (Rocky Mts. etc.), Mexico, **Lochman** (4); U.S.S.R. (Kuznetsk), **Yavorsky**.

Cambrian (Lower). — Canada (B.C.), U.S.A. (Alabama, Nevada), **Harrington**; Estonia, **Õpik** (1); Pakistan (Salt Range), **Schindewolf** (2), **Seilacher**; U.S.A. (Appalachians), **Rodgers** (2); U.S.A. (California, Nevada), **Hewett**; U.S.S.R. (Siberia, Turkestan), **Suvorova** (2); U.S.S.R. (Yakutsk), **Suvorova** (1).

Cambrian (Lower and Middle). — U.S.A. (Nevada), **Hazzard & Mason**; U.S.A. (N.Y., Virginia), Spain (Andalusia), **Lochman** (2); U.S.S.R. (E. Sayan), **Repina**; U.S.S.R. (E. Sayan), **Repina et al.**

Cambrian (Middle). — Australia (Northern Territory), **Ivanac**; Australia (Victoria), **Harris & Thomas**; Tasmania, **Elliston**; U.S.A. (California), **Stoyanow**; U.S.A. (Wyoming) **Shaw** (1); U.S.S.R. (E. Siberia), **Chernysheva** (2).

Cambrian (Middle and Upper). — Australia (Queensland), **Õpik** (2); S.E. Asia, **Kobayashi** (2); U.S.A. (Arizona), **Palmer** (1); U.S.A. (California and Nevada), **Palmer & Hazzard**; U.S.A. (Wyoming), **Shaw & DeLand**; U.S.A. (Wyoming, Montana), **Shaw** (3); U.S.S.R. (Kazakhstan), **Ivshin**.

Cambrian (Upper). — Argentina (Mendoza), **Rusconi** (1); Canada (B.C.), U.S.A. (Texas, Arizona), **Wilson**; China (An-hwei), **Lu** (1); Korea, Manchuria, **Kobayashi** (1); Sweden, **Tjernvik**; U.S.A., **Rasetti** (1); U.S.A. (California), **McAllister**; U.S.A. (Central States), **Lochman** (3); U.S.A. (Michigan), **Stumm**; U.S.A. (Nevada), **Palmer** (2); U.S.A. (Nevada, Wisconsin), Europe, Asia, **Lochman** (1); U.S.A. (N.Y.), **Fisher** (1); U.S.A. (Oklahoma), **Frederickson**; U.S.A. (Tennessee and Virginia), **Bridge**; U.S.A. (U. Mississippi Valley), **Bell et al.**; U.S.A. (Wisconsin, Minnesota), **Moore, Nelson**; U.S.A. (Wyoming), **Shaw** (2), **DeLand & Shaw**.

Ordovician. — China (Nanking), **P'an**; Estonia, **Rõõmusoks** (1); Indochina, **Fromaget**; Sweden (Dalarna), **Eire**, U.S.A. (Va), France, **Whittington** (5); U.S.A. (Nevada), **Nolan et al.**; U.S.A. (N.Y.), **Lochman** (2);

U.S.A. (Virginia and W. Virginia), **Kay**; U.S.S.R. (Kuznetsk), **Yavorsky**; U.S.S.R. (Siberia), **Ivanova et al.**; U.S.S.R. (Urals), **Ivanov & Myagkova**.

Ordovician (Tremadoc). — Britain (England), **Curtis, Stubblefield** (9); Norway, **Henningsmoen** (3); U.S.A. (Texas), **Wilson**; U.S.S.R. (Kazakhstan), **Ivshin**.

Ordovician (Lower). — Argentina (Mendoza), **Rusconi** (1), (2); Australia (W. Australia), **Õpik** (3); Sweden, **Jaanusson** (4); Sweden and Norway, **Tjernvik**; U.S.A., Europe, Asia, **Lochman** (1); U.S.A. (California), **McAllister**; U.S.A. (Maryland), **Sando**; U.S.A. (N. Mexico), **Flower**; U.S.A. (Tennessee), **Bridge**; U.S.A. (Utah), **Hintze & Jaanusson**.

Ordovician (Lower and Middle). — Baltic and Scandinavia, **Jaanusson** (5); Korea, Manchuria, Tasmania, **Kobayashi** (1).

Ordovician (Middle). — Bohemia, **Šnajdr, Whittington** (2); Britain (Shropshire and Wales), **Whittard**; Estonia, **Rõõmusoks** (2); U.S.A. (Tennessee), **Neuman**.

Ordovician (Middle and Upper). — U.S.A. (California), **Langenheim et al.**; U.S.A. (Virginia), Bohemia, **Eire**, Estonia, Scandinavia, **Whittington** (1); U.S.S.R. (Kazakhstan), **Yunnan**, Korea, **Chugaeva**.

Ordovician (Upper). — Britain (N. Wales), **Harper**; Estonia, **Jaanusson** (6); Estonia and U.S.S.R. (Leningrad), **Oraspõld & Rõõmusoks**; Finland [in boulders], **Martinsson**; Morocco, **Choubert et al.**; Poland (Lysa Gora), **Kielan**; U.S.A. (Ohio), Britain (Scotland), **Eire, Whittington** (3).

Silurian. — China (Hu-peh), **Chow**; China (Nanking), **P'an**; Japan, **Kamei & Igô**; Sweden, Estonia, **R. & E. Richter** (2); U.S.A. (California), **McAllister**; U.S.S.R. (Siberia), **Ivanova et al.**

Silurian (Lower and Middle). — Bohemia, Britain (England, Scotland), **Whittington** (1); Britain (England), **Curtis**.

Silurian (Middle).—Bohemia, **R. & E. Richter** (1); Britain (England), Bohemia, **Whittington** (3).

Silurian (Upper).—China (Kweichow), **Tsin**; U.S.A. (N. Jersey and N.Y.), **Swartz & Whitmore**; U.S.S.R. (Kuznetsk), **Chernysheva** (1).

Devonian.—China (Sze-chwan), **Yoh**; France (Armorica), **Pillet**; Japan (Gifu), **Kobayashi & Igō**; U.S.S.R., **Weber** (2); U.S.S.R. (Kuznetsk), **Chernysheva** (1).

Devonian (Lower). — Germany (Rhineland), **Schmidt**; U.S.A. (N.Y.), **Whittington** (2), (8); U.S.A. (N.Y., Oklahoma), **Whittington** (3); U.S.A. (Oklahoma), **Whittington** (1).

Devonian (Lower and Middle).—Germany (Eifel), Bohemia, **R. & E. Richter** (3).

Devonian (Middle). — Bohemia, **Whittington** (3); Czechoslovakia (Silesia), **Strnad** (1), (2); Germany, **R. & E. Richter** (2); Germany (Rhine-land), **Bierther**; Japan (Iwate), **Okubo** (1), (2); Lithuania, **Krivtsov**; U.S.A. (New York), **Oliver**.

Devonian (? Middle). — Venezuela (S.W.), **Pierce**.

Devonian (Middle and Upper). — Germany, **Richter**; Germany (Eifel, Westerwald), **R. & E. Richter** (1).

Devonian (Upper). — Germany (Rhineland), **Schmidt**; Germany (Thuringia), **Müller**; Poland (L. Silesia), **Lewowicki**.

Carboniferous. — Indochina, **Fromaget**; U.S.A. (Arizona), **Gilluly et al.**; U.S.A. (California, Nevada), **Hewett**; U.S.S.R. (Kuznetsk), **Yavorsky**.

Carboniferous (Lower). — U.S.A. (Nevada), **Nolan et al.**; U.S.S.R., **Weber** (1); U.S.S.R. (Mugodzhazh Mts.), **Balashova**.

Permian. — China (Hu-peh), **Chow**; U.S.A. (Arizona), **Gilluly et al.**

III.—SYSTEMATIC INDEX

N.B.—Since all the species of the group are fossil, the † used elsewhere in the Zoological Record to indicate fossils is here omitted.

Acanthaloma Conrad 1840 considered probably valid but suppression urged (in favour of *Leonaspis* R. & E. Richter 1917), **Whittington** (8).

Acanthaloma see *Leonaspis*.

Acanthaloma olini (Troedsson) p. 260, **Kielan**.

Acanthalomina see *Leonaspis*.

Acanthalominae Prantl & Přibyl 1949 a synonym of *Odontopleurinae* Burmeister 1843 p. 196, **Whittington** (1).

Acanthaspides barbarus gen. et sp. nov. [nom. nud.] p. 8, **Ivshin**.

Acantholoma Conrad 1841 considered (as an erroneous subsequent spelling of *Acanthaloma* C. 1840) to be invalid; *A. spinosa* C. 1841 a nomen dubium, suppression urged, **Whittington** (8).

Acantholoma Castelnau 1843 considered (as an erroneous subsequent spelling of *Acanthaloma* Conrad 1840) to be invalid; *A. conradi* Castelnau 1843 a nomen dubium, suppression urged (in favour of *Acidaspis tuberculatus* Hall 1859), **Whittington** (8).

Acantholoma (Kettneraspis) moravica Strnad [nom. nud.] p. 73 (79), **Strnad** (1).

Acanthopyge consanguinea (Clarke 1894) for *Arges consanguineus* C. holotype refigured p. 1202 pl. cxxxi figs. 7–20, 23, ? 21–22 (hypostome attributed), **Whittington** (6).

Acaste downingiae rare alkali elements content table 1, **McKerrow et al.** (2).

Acerocare ecorne p. 52, **Henningsmoen** (3).

Acheilus ? sp. p. 22, **PALMER** in **Nolan et al.**

Acidaspidites lermontovae sp. n. p. 81 pl. vi figs. 16–17 Cambrian (Middle) U.S.S.R. (Siberia), **Chernysheva** Middle Cambrian trilobites from Eastern Siberia Part I 1953.

Acidaspis Murchison 1839 discussed p. 232, *A. brightii* M. text-figs. 13 A–C; *A. tremenda* Barrande ten-

tatively excluded from *Diacanthaspis* p. 210, *A. ulrichi* Bassler of unknown affinities p. 282, Whittington (1).

Acidaspis Murchison 1839 discussed p. 510, *A. brightii* Murchison p. 510 pl. lviii figs. 8, 12 text-figs. 1A-C, *A. cincinnatiensis* Meek 1873 holotype refigured with synonyms *A. anchoralis* Miller 1875, probably *A. o'nealli* M., & *A. rebecca* Bassler 1932 (refigured) p. 512 pl. lviii figs. 9-11, 13-14, pl. lix figs. 1-3, 6, 9-11; *A. discreta* Reed 1935 a synonym of *Proceratocephala terribilis* (R. 1914) [quod vide] p. 515, Whittington (3).

Acidaspis tuberculatus Hall 1859—proposed to be validated and so attributed by suppressing its homonym *A. tuberculatus* Conrad 1840 and probable synonyms *Acantholoma spinosa* C. 1841 and *Acantholoma conradi* Castelnau 1843, Whittington (8).

Acidaspis tuberculatus—the protaspis attributed by Beecher 1893 redescribed as a Phacopid [quod vide], Whittington (2).

Acidaspis sp. rare alkali elements content table 1, McKerrow et al. (2).

Acidaspis sp. p. 70, V. N. WEBER in Yavorsky.

Acmarchachis Resser—*Agnostus australiensis* Chapman referred p. 247, Öpik (4).

Acontheus cf. *acutangulus* Angelin p. 20, Öpik (2).

Acrocephalaspis gen. n. [Familia incerta, compared with *Acrocephalites*] p. 41 for type *A. fidus* sp. n. p. 43 pl. viii figs. 1-11, 11 a-b, pl. iv fig. 18 Cambrian (Upper) U.S.S.R. (Kazakhstan), Ivshin Upper Cambrian trilobites of Kazakhstan Part I 1956.

Acrocephalites ? *glomeratus* Walcott 1916 horizon and locality discussed, referred to *Rawlinsella* gen. n. p. 46, Shaw (1).

Acrocephalites see *Acrocephalaspis* gen. n.

Acrolichas sp. pl. xxvi fig. 5, Ivanov & Myagkova.

Acrolichas sp. pp. 153, 159, Neuman.

Actinopeltis completa (Barrande) lectotype p. 509, Šnajdr.

Agerina gen. n. [Bathyruridae] p. 197 for type *A. erratica* sp. n. for *Proetus* sp. aff. *wöhrmanni* of Tjernvik 1952 p. 198 pl. i figs. 24-26 text-fig. 29, *A. praematura* sp. n. for *Orometopus elatifrons* of Moberg and S. 1906 *partim* (pl. 7 figs. 4-5) p. 200 pl. i figs. 22-23 Ordovician (Lower) Sweden, *A. woehrmanni* (Schmidt) for *P. w.* Schmidt 1907, Tjernvik Bull. geol. Instn Univ. Upsala 36 2-3 1956.

Agnostida (various) recorded p. 116, Rusconi (3).

Agnostidae recorded p. 6, P'an.

Agnostus (*Geragnostus*) recorded p. 23, Öpik (2).

Agnostus (or *Homagnostus* ?) recorded p. 173, Öpik in Banks.

Agnostus australiensis Chapman referred to *Acmarchachis* p. 247, Öpik (4).

Agnostus calvus Lake specimen of Stubblefield 1933 listed p. 147, Curtis.

Agnostus sidenbladhi Linnarsson and *A. törnquisti* Holm referred to *Geragnostus*, *A. lentiformis* Angelin and *A. glabratus* A. to *Trinodus*, Tjernvik.

Agnostus sp. p. 16, 18, PALMER in Nolan et al.

"*Agnostus*" sp. listed p. 1343, Lochman (2).

Agraulos — relations of Scandinavian spp. with *Nasocephalus* discussed p. 1342, Wilson.

Agraulos cf. *difformis* Angelin p. 20, Öpik (2).

Agraulos sp. p. 646, Hazzard & Mason.

cf. *Agraulos* sp. undet. 2 Cobbold 1913 listed p. 1342, Lochman (2).

Aguaraya acutispina Ruse. pl. i fig. 2, Rusconi (2).

- Aidarella* see *Urbanaspis* gen. n.
- Albansia* cf. *A. montanensis* (Howell & Duncan) p. 21, **Palmer** (1).
- Aldanaspis* Lermontova 1940 discussed and referred to *Dokimocephalidae* p. 57, *A. punctatus* L. p. 58 pl. vi figs. 1-4, *A. truncatus* L. MS sp. n. p. 61 pl. vi figs. 5-7 Cambrian (Middle) U.S.S.R. (Siberia), **Chernysheva** Middle Cambrian trilobites from Eastern Siberia Part I 1953.
- Aldonaia ornata* Lerm. p. 271, **Repina**.
- Aldonaia ornata* Lerm. p. 85, **Suvorova** (1).
- Alokistocare* aff. *A. althea* (Walcott), *A. sp.* cf. *A. subcoronatum* (Hall & Whitfield) p. 645, **Hazzard & Mason**.
- Alokistocare* ? sp. p. 16, **PALMER** in **Nolan et al.**
- Alokistocarella* p. 41, **Shaw & DeLand**.
- Alokistocarella wyomingensis* (Miller) for *Crepicephalus* ? w. M. 1936 p. 144, **Shaw** (3).
- Amecephalus* see *Pedinocephalus* gen. n.
- Amecephalus cormoranus* Rusc. pl. i fig. 7, **Rusconi** (2).
- Ameura* ? or related form pp. 10, 11, **J. M. Weller** in **Gilluly et al.**
- Amgaspis* recorded p. 135, **Repina et al.**
- Amgaspis* sp. p. 270, **Repina**.
- Amphilichas* recorded p. 93, **Kay**.
- Amphilichas lineatus* (Ang.) p. 373, **Jaanusson** (6).
- Amphilichas sniatkovi* Web., *A. batchaticus* W., *A. cucullus* M. & W., *A. wahlenbergi* ? Warb. p. 65, **V. N. Weber** in **Yavorsky**.
- Amphoton* recorded p. 41, **Öpik** (3).
- Amphoton serotinum* p. 19, **Öpik** (2).
- "*Amphoton*" sp. pp. 155, 156, **Thomas & Singleton**.
- "*Amphoton*" spp. p. 286, **O. P. Singleton** in **Benson**.
- Ampyx bulbifer* Weber 1932 type of *Bulbaspis* gen. n. [quod vide] p. 1336, **Chugaeva**.
- Ampyx drummuckensis* (Reed) p. 390, **Harper**.
- Ampyx pater* Holm p. 270 pl. xi figs. 13-14, *A. cf. pater* p. 270 pl. xi fig. 15, *A. obtusus* Moberg & Segerberg lectotype chosen and figured p. 271 pl. xi figs. 16-18, *A. cf. o.* listed p. 279, **Tjernvik**.
- Ampyx* sp. p. 153, **Neuman**.
- Ancyropyge* Clarke 1892 may be an *Odontopleurid* p. 282, **Whittington** (1).
- Anemocephalus satpakensis* gen. et sp. nov. [nom. nud.] p. 8, **Ivshin**.
- Ankoura guatana* Rusc. pl. vii fig. 6, **Rusconi** (2).
- Ankoura* ? sp. p. 21, **Palmer** (1).
- Annamitia spinifera* Mansuy discussed p. 279 pl. xl figs. 13-15, **Kobayashi** (2).
- Anomocare* cf. *confertum* Whitehouse p. 18, **Öpik** (2).
- Anomocare lermontovae* Ivsh. [not seen] p. 7, **Ivshin**.
- Anomocare siberica* and *A. extornata* Holm & Westergård referred to *Anomocarina* pp. 78, 80 ; *A. sp.* listed p. 87, **Chernysheva** (2).
- Anomocarella* sp. p. 271, **Repina**.
- Anomocarella* ? p. 171, **Öpik** in **Elliston**.
- Anomocarella* ? recorded p. 174, **Öpik** in **Banks**.
- Anomocarina splendens* Lermontova p. 75 pl. viii figs. 4-8, *A. siberica* (Holm & Westergård) for *Anomocare s. H. & W.* p. 78 pl. viii figs. 1-3, *A. extornata* (H. & W.) for *Anomocare e. H. & W.* p. 80 pl. viii fig. 9, *A. excavata* (Ang.) p. 89, **Chernysheva** (2).
- Anomocarioides limbataeformis* Lermontova p. 69 pl. vii figs. 1-4, *A. speciosus* sp. n. p. 72 pl. vii figs. 8-10 Cambrian (Middle) U.S.S.R. (Siberia), **Chernysheva** Middle Cambrian trilobites from Eastern Siberia Part I 1953.
- Anomocarioides polynensis* Ivsh. [not seen] p. 7, **Ivshin**.
- Anopolenus* Salter 1864 discussed p. 205, *A. henrici* S. p. 26 pl. iv figs. 3-8, *A. sp.* p. 86, **Chernysheva** (2).

Antagmus adamsi (Billings) listed p. 1355, **Lochman** (2).

Antagmus sp. p. 8, **PALMER** in **Nolan et al.**

Antatlasidae — suggested reference of *Inouyina* Poletayeva p. 449, **Lochman** (1).

Aojia recorded p. 19, **Öpik** (2).

Apachia convexa sp. n. p. 546 pl. lxxv figs. 4–6 Cambrian (Upper) U.S.A. (Wyoming), **DELAND** in **DeLand & Shaw** J. Paleont. 30 3 1956.

Apachia p. 42, **Shaw & DeLand**.

Apatokephaloides ? sp. p. 22, **PALMER** in **Nolan et al.**

Apatokephalus serratus (Boeck) discussed p. 204 pl. ii figs. 7–8 text-fig. 32A, record of **Stermmer** 1922 probably a new sp. p. 205, *A. dubius* (Linnarsson) type apparently lost, *A. sp.* p. 206, *A. pecten* **Wiman** p. 278; *A. s.* var. *d.* of **Schmidt** 1907 may belong to *Menoparia* ? *nericiensis* sp. n. p. 206, **Tjernvik**.

Apatokephalus ? sp. p. 22, **PALMER** in **Nolan et al.**

Aphelaspis **Resser** 1935 discussed p. 31, *A. nobilis* sp. n. p. 33 pl. iii figs. 1–13, 27 [*A. sp.* on pl. expl.], pl. iv figs. 16–17, *A. boschekkulensis* sp. n. p. 36 pl. iv figs. 1–11, *A. formosus* sp. n. p. 39 pl. iv figs. 12–13, *A. sp.* pl. iii figs. 24, 26, pl. iv figs. 19–25 Cambrian (Upper) U.S.S.R. (Kazakhstan), **Ivshin** Upper Cambrian trilobites of Kazakhstan Part I 1956.

Aphelaspis **Resser** 1933 [sic] referred to Pterocephaliidae p. 458, **Lochman** (1).

Aphelaspis see *Kujandaspis* gen. n.

Aphelaspis see *Kujandina* gen. n.

Aphelaspis see **N.** gen.

Aphelaspis ? recorded p. 174, **ÖPIK** in **Banks**.

Aphelaspis camiro (Walcott), *A. hamblenensis*, *A. laxa*, *A. quadrata*, *A. simulans*, *A. tumifrons*, *A. walcotti* **Resser** spp. p. 20, **LOCHMAN** in **Bridge**.

Aphelaspis walcotti **Resser** p. 21, **Palmer** (1).

Aphelaspis walcotti **Resser** p. 51 pl. ix figs. 1–6, **Shaw** (2).

Aphelaspis walcotti p. 42, **Shaw & DeLand**.

Aphelaspis sp. p. 10, **A. R. PALMER** in **McAllister**.

Aphelaspis sp. undet. [possibly including *A. cf. A. walcotti* of **Wilson** 1954 *partim* (pl. 26 fig. 17)] p. 1347 pl. cxlvi figs. 3, 9, 10, **Wilson**.

Aphelaspis n. sp. [undeser.] p. 158, **SINGLETON** in **Thomas & Singleton**.

Aphelaspis sp. nov. [undeser.] p. 36, **SINGLETON** in **Harris & Thomas**.

Apianurinae subfam. n. [Odontopleuridae] for *Apianurus* and *Calipernurus* gen. n. p. 252, **Whittington** Bull. Mus. comp. Zool. Harv. 114 5 1956.

Apianurus gen. n. [Odontopleuridae (Apianurinae)] p. 252 for type *A. barbatus* sp. n. p. 254 pl. xvii figs. 1–21, pl. xviii figs. 1–24, pl. xix figs. 1–29, pl. xx figs. 1–17, 19, text-figs. 1 (terminology), 19 A–B, 20 A–C (reconstructions), 21 (graph), 22 A–F (development), *A. glaber* sp. n. p. 268 pl. xxi figs. 1–15, *A. sp. ind.* p. 269 pl. xxi figs. 16–22, 25–26 Ordovician (Middle) U.S.A. (Va), *A. aff. furcata* (Linnarsson) p. 270 pl. xx figs. 18, 20–25, *A. kuckersiana* (**Schmidt**), *A. k.* var. *mickwitzi* (S.), *A. asklundi* (**Thorslund**), *A. clevei* (**Warburg**) [tentatively including **W.** 1925 pl. 6 figs. 7, 9] all so referred p. 271, **Whittington** Bull. Mus. comp. Zool. Harv. 114 5 1956.

Arapahoia butleri (**Stoyanow**) with synonym *A. reesidei* **Resser** p. 546 pl. lxiii fig. 1, *A. levis* **Miller** p. 547 pl. lxiii fig. 12, *A. sp. indet.* p. 547 pl. lxiii fig. 2, **DeLand & Shaw**.

Arapahoia butleri, *A. levis* p. 42, **Shaw & DeLand**.

Arapahoia lasheriana **Ruse** pl. vi fig. 13, *A. australis* **R.** pl. vi fig. 14, **Rusconi** (2).

Arapahoia ransomei (**Stoyanow**) p. 21, **Palmer** (1).

Archaeops Hupé 1952 [recte 1953] a synonym of *Redlichia* p. 282, Schindewolf (2).

Arges consanguineus Clarke 1894 referred to *Acanthopyge* p. 1202, protaspis which was referred to *A. consanguineus* by Beecher 1895 considered not certainly attributable p. 1200 [see Lichid protaspis], Whittington (6).

Armonia Walcott 1924—*Modocia* Resser 1935 [recte W. 1924] probably a junior synonym p. 1343, C. LOCHMAN in Wilson.

Armonia cf. *A. lata* (Howell & Duncan) p. 21, Palmer (1).

Armonia sp. undet. p. 1343 pl. cxlvi figs. 1–2, Wilson.

Asaphellus Callaway 1877 referred to *Megistaspis*-group p. 65, Jaanusson (5).

Asaphellus Callaway—*Kayseraspis* Harrington 1938 may be a subgenus, *A. ? orientalis* Endo *partim* [hypostome pl. 13 fig. 21] probably belongs to *Isotelus spiculum* E. which is referable to *A.* or *K.* p. 18, Kobayashi (1).

Asaphellus ? venta Hintze type of *Aulacoparia* gen. n., *A. ? quadrata* H. type of *A. (Aulacoparina)* subgen. n. to which are tentatively referred *A. ? eudocia* and *A. ? sp.* *A.* both of Ross 1951, Hintze & Jaanusson.

Asaphellus [sp. undet.] and *Trigonocerca* [sp. undet.] of Wilson 1954 may belong to a sp. of *Kayseraspis* p. 1347, R. J. Ross in Wilson.

Asaphid see *Homalopyge* gen. n.

Asaphid recorded p. 53, Öpik (3).

Asaphid fragments listed p. 1343, Lochman (2).

Asaphid fragments p. 173, Neuman.

Asaphidae — four Eichwald 1825 spp. of *Cryptonymus* [quod vide] referred as nomina dubia p. 60, Jaanusson (2).

Asaphidae see *Aulacoparia* and *Stenorhachis* genn. n.

Asaphidae see *Varvia*, *Lapidaria*, *Hunnebergia* genn. n., and Genus and species indet.

Asaphidae see *Yüpingia* gen. n.

Asaphiscidae considered related to Crepicephalidae p. 1269, Rasetti (1).

Asaphiscinae — assignment of *Blountia*, *Blountiella* and *Maryvillia* accepted p. 1269, Rasetti (1).

Asaphiscus aff. *gregarius* p. 19, Fromaget.

Asaphiscus aff. *gregarius*—record of Fromaget & Bonelli 1932 discussed, considered possibly related to *Blainia* p. 278 pl. xl fig. 16, called *Balinia* [error pro *Blainia*] ? aff. *g.* on pl. expl., Kobayashi (2).

Asaphiscus laeviceps (Walcott) p. 18, *A.* sp. pp. 12, 16, PALMER in Nolan et al.

Asaphoidae — possible relations to Ceratopygidae, Housiidae and Dikelocephalinidae discussed p. 457 text-fig. 5, Lochman (1).

Asaphopsis jacobii p. 27, Fromaget.

Asaphus Brongniart in Desmarest 1817 suppression urged in favour of *Asaphus* Brongniart 1822 [quod vide] p. 94, Jaanusson (3).

Asaphus Brongniart 1822 suggested to be validated by the suppression of *Asaphus* B. 1817 and to be placed on Official List of Generic Names with type species *Entomos-tracites expansus* Wahlenberg 1821 [so attributed and dated] of which lectotype selected and figured [selection of lectotype and neotype by Balaschova 1953 being invalid] pl. i figs. 1–5, *A. cornigerus* (Schlotheim 1820) [designated as type of *A.* by Miller 1889] considered nomen dubium and suppression urged pp. 90–94, Jaanusson (3).

Asaphus angustifrons Dalman 1827—proposed designation as type of *Ptychopyge* Angelin [quod vide] p. 360, Jaanusson (1).

Asaphus ex. gr. *expansus* Dalman p. 57 pl. xxv figs. 1a, 6, b, *A.* cf. *ludibundus* Törnquist p. 57 pl. xxv figs. 2a, 6, b, *A.* sp. listed p. 62 pl. xxvi fig. 6, Ivanov & Myagkova.

Asaphus hausmanni Brongniart 1822—proposed protection by suppression of its probable senior synonym *Trilobus punctatus* Brünnich

1781, and designation as type of *Odontochile* Hawle & Corda 1847, Tripp & Whittard.

Asaphus stacyi Schmidt 1898 type of *Homalopyge* gen. n. p. 73, *A. centaurus* Dalman 1827 a nom. nud. p. 72, *A. heros* D. 1828 [sic] may belong to *Megistaspis* (*Megistaspidella*) subgen. n. p. 72, Jaanusson (5).

Asaphus sp. [resembling *A. broegeri* Schmidt] p. 258, Tjernvik.

Asaphus sp. listed p. 188, Ivanova et al.

Asaphus sp. rare alkali elements content table 1, McKerrow et al. (2).

Asaphus sp. p. 65, V. N. WEBER in Yavorsky.

Aspidagnostus — cephalon stated to belong to *Clavagnostus*, pygidium to *Pseudagnostus* p. 21, ÖPIK (2).

Aspidagnostus ? sp. p. 21, Palmer (1).

Asteropyge (*Asteropyge*) *lobispina* R. & E. Richter [nom. nud.] p. 102 n, Schmidt.

Asteropyge (*A.*) *punctata*, *A.* (*Neometacanthus*) *stellifera* p. 373, R. & E. Richter (2).

Asthenopsis see *Solenopleura*.

Asthenopsis recorded p. 66, Casey & Gilbert-Tomlinson.

Asthenopsis recorded p. 41, ÖPIK (3).

Astycoryphe senckenbergiana p. 372, R. & E. Richter (2).

Atops trilineatus Emmons p. 1383 pl. vi fig. 1; *A. trilineatus* of Ford 1875 referred to cf. *Fordaspis nana* (F.) p. 1389, Lochman (2).

Aulacoparia gen. n. [Asaphidae] p. 51 for type *Asaphellus* ? *venta* Hintze 1953, *A.* (*Aulacoparia*) *venta* text-fig. 1A, "*Xenostegium*" *taurus* of Ross 1951 (non Walcott) referred to *A.* (*A.*) p. 53; *A.* (*Aulacoparina*) subgen. n. p. 54 for type *Asaphellus* ? *quadrata* H. 1953 text-fig. 1B and including probably *A.* ? *eudocia* and *A.* ? sp. *A.* both of Ross 1951 Ordovician (Lower) U.S.A. (Utah), Hintze & Jaanusson Bull. geol. Instn Univ. Upsala 36 1 1956.

Aulacoparina subgen. n. of *Aulacoparia* gen. n. [quod vide].

Aulacopleura (*Paraaulacopleura*) *halfari* sp. n. p. 73 (80) pl. i figs. 1-2, pl. ii figs. 3-4 Devonian (Middle) Czechoslovakia (Silesia), Štrnad Sborn. Sluko [A] 2 1956.

Bailiaspis dalmani Angelin (formerly called *Conocoryphe bufo* Hicks) from S. Wales p. 18, Stubblefield (9).

Bailiella Matthew 1884 discussed, *B. cobboldi* Resser p. 9 pl. i fig. 6, Chernysheva (2).

Basilicella sp. p. 77, Kay.

Basocephalus nominalis Ivsh., *B. weberi* I. [not seen] p. 7, Ivshin.

Bathynotus n. sp. [undescribed] of *holopyga* (Hall) p. 43, ÖPIK (3).

Bathyruridae see *Agerina* gen. n.

Bathyriscellus robustus Lerm. p. 96, Suvorova (1).

Bathyriscidae recorded p. 168, ÖPIK in Elliston.

Bathyriscidella palauquiana Rusc. pl. i fig. 16, Rusconi (2).

Bathyriscidella palauquiana Rusc. p. 117, Rusconi (3).

Bathyriscids recorded p. 173, ÖPIK in Banks.

Bathyriscus howelli var. *lodensis* Clark type material discussed and illustrated, sp. may be attributable to *Sonoraspis* [quod vide] p. 680 pl. i figs. 1-2 [where called *Glossopleura lodensis*], Stoyanow.

Bathyriscus sp. p. 12, PALMER in Nolan et al.

Bellaspidella Rasetti 1945 referred to *Idahoidea* fam. n. p. 459, Lochman (1).

Bellefontia recorded p. 936, Sando.

Bellefontia tentatively recorded p. 23, ÖPIK (2).

Bellfontia [sic] sp. p. 11, J. BRIDGE & G. A. COOPER in McAllister.

Beltella depressa (Salter) specimen of Stubblefield 1933 listed p. 148, Curtis.

Bergeroniaspis Lermontova 1951 discussed and referred to Protoleninae p. 107; *B. kutorginorum* L. 1951 p. 108 pl. ix figs. 11–14 text-fig. 37, *B. divergens* (L. 1940) p. 110 pl. x figs. 1–5 text-fig. 38 (restor.), *B. ornata* L. 1951 p. 114 pl. x figs. 6–13 text-figs. 39–40, *B. subornata* sp. n. p. 118 pl. xi figs. 1–11 text-figs. 41 (restor.)–42 (5 growth-stages), *B. procera* sp. n. p. 123 pl. xii figs. 8–11 text-fig. 43, *B. nitens* sp. n. p. 125 pl. xii figs. 12–13 text-fig. 44 Cambrian (Lower) U.S.S.R. (Yakutsk), *Suvorova* Trav. Inst. paléont. Acad. Sci. U.R.S.S. 63 1956.

Bergeroniaspis divergen [sic] Lerm. p. 270, *B. sp.* p. 271, **Repina**.

Bergeroniellus Lermontova 1940 discussed and referred to Protoleninae p. 55, *B. micmaciformis* sp. n. p. 57 pl. iii figs. 7–11, pl. iv figs. 1–4 text-figs. 19–20, *B. guarvii* sp. n. p. 63 pl. iv figs. 5–9, pl. 2 fig. 4 *pars a* text-fig. 21 (restoration), *B. spinosus* L. 1951 including *B. asiaticus* of L. 1940 *partim* (pl. 38 fig. 1) and of L. 1951 *partim* (pl. 10 figs. 1, 1a–d) p. 67 pl. iv fig. 10, pl. v figs. 1–9, pl. 1 fig. 1, pl. 2 figs. 2–3, text-figs. 22 (restor.)–23 (6 growth-stages), *B. flerovae* L. 1951 p. 74 pl. vi fig. 1 text-fig. 24 (restor.), *B. asiaticus* L. 1940 excluding several figs. of L. 1940 and 1951 and including synonym *B. brevicolus* [sic] L. 1951 and *B. atlassovi* L. 1951 *partim* (pl. 11 fig. 4a) p. 77 pl. vi figs. 2–10, pl. 1 figs. 6–7, pl. 2 fig. 1, pl. 3 fig. 1 text-figs. 25 (restor.), 26, 27 (5 growth-stages), *B. atlassovi* L. 1951 restr. (pl. 11 fig. 4) p. 85 text-fig. 28, *B. lermontovae* sp. n. p. 87 pl. vii figs. 1–7, pl. viii figs. 1–7, pl. 1 figs. 2–5 text-figs. 29 (restor.)–31 (9 growth-stages), *B. ketemensis* sp. n. p. 96 pl. vii figs. 8–9 text-fig. 32, *B. expansus* (L.) for *B. asiaticus* var. *e.* L. 1951 p. 98 pl. ix figs. 1–10, pl. 3 fig. 2 *pars a* text-figs. 33 (restor.)–34 (3 growth-stages), *B. praexpansus* [preexpansus on pl. expl.] sp. n. p. 104 pl. vii figs. 10–11 text-fig. 35, *B. solitarius* sp. n. p. 105 pl. vii figs. 12–13 text-fig. 36 Cambrian (Lower) U.S.S.R. (Yakutsk); *B. ? clavatus* L. referred to *Lermontovia* gen. n. p. 52, *Suvorova* Trav. Inst. paléont. Acad. Sci. U.R.S.S. 63 1956.

Bergeroniellus sp. p. 135, **Repina et al.**

Berkeia affinis (Walcott) p. 19, **PALMER in Nolan et al.**

Berkeia recorded p. 1559, **Fisher (1).**

Bernia Frederickson 1949 referred to Parabolinoiidae fam. n. p. 454, **Lochman (1).**

Bettonia gen. n. [Trinucleidae] p. 66 for type *B. frontalis* sp. n. p. 67 pl. ix fig. 7, *B. paucipuncta* sp. n. p. 68 pl. ix figs. 9–11, *B. irregularis* sp. n. p. 69 pl. ix fig. 12, *B. superstes* sp. n. p. 70 pl. ix fig. 15 Ordovician (Middle) Britain (Shropshire), *B. gibbosa* (Elles 1940) for *Trinucleus* (*Cryptolithus*) *g.* E. restr. holotype refigured p. 67 pl. ix fig. 8, *B. chamberlaini* (E.) for *T. c.* E. holotype and paratype refigured p. 69 pl. ix figs. 13–14, **Whittard** Palaeontogr. Soc. [Monogr.] 110 1956.

Bienvillia corax (Billings) p. 22, **PALMER in Nolan et al.**

Binodaspis spinosa Lerm. p. 96, *B. sp. cf. s.* p. 114, *B. sp. I* Lerm. p. 85, *B. sp. p.* 96, *Suvorova (1).*

Binodaspis cf. spinosa Lerm. p. 270, **Repina.**

Blackwelderia recorded p. 85, **Traves (2).**

Blackwelderia ? p. 22, **Öpik (2).**

Blackwelderia alastor p. 32, **Fromaget.**

Blackwelderia cf. biloba Kobayashi p. 171, **Öpik in Elliston.**

Blackwelderia cf. biloba Kobayashi p. 174, **Öpik in Banks.**

Blackwelderia sp. p. 52, **Traves (1).**

Blainia—*Asaphiscus* aff. *gregarius* record of Fromaget & Bonelli 1932 may be related p. 278, *Kobayashi (2).*

Blandicephalus Palmer 1954 [recte 1955] referred to Pteroccephaliidae p. 458, **Lochman (1).**

Blountia assignment to Asaphiscinae supported; *B. angustata*, *B. arguta*, *B. widnerensis* Resser 1942 spp. synonyms of *Maryvillia arion* Walcott p. 1267; *Maryvillia bristolensis* and probably *M. violaensis* R. considered typical of *B. p.* 1268, **Rasetti (1).**

Blountia alexas, *B. anser*, *B. mimula* (Walcott spp.), *B. rogersvillensis* Resser [with synonym *Blountiella lata* R.], *B. assimilis* R., *B. crassa* R., *B. arcuosa* R. p. 20, LOCHMAN in Bridge.

Blountia cf. *B. assimilis* Resser p. 1343, Wilson.

? *Blountia baranqueana* Rusc. pl. i fig. 5, *B. cuyana* R. pl. vii fig. 3, *B. pampeana* R. pl. vii fig. 4, Rusconi (2).

Blountia carlotta Lochman p. 548 pl. lxiii figs. 3-8, DeLand & Shaw.

Blountia carlotta & *B. c.*? p. 42, Shaw & DeLand.

Blountia socorrensis sp. n. p. 117 text-fig. 3, *B. luanensis* sp. n. p. 118 text-fig. 4 Cambrian Argentina (Mendoza), Rusconi Rev. Mus. Hist. nat. Mendoza 9 3-4 1956.

Blountia sp. p. 21, Palmer (1).

Blountia n. sp. [undeser.] p. 158, SINGLETON in Thomas & Singleton.

Blountiella buttsi Resser listed; *B. lata* R. a synonym of *Blountia rogersvillensis* R. p. 20, LOCHMAN in Bridge.

Blountina Lochman 1944 a synonym of *Maryvillia* Walcott 1916 to which its type *B. eleanora* L. 1944 is referred, *B. triangularis* L. 1944 and *B. westoni* Rasetti 1946 synonyms of *M. arion* W. 1916 p. 1267, Rasetti (1).

Boeckaspis hirsuta p. 52, Henningsmoen (3).

Bolaspidella see *Bolaspis*.

Bolaspidella & *B.*? p. 42, Shaw & DeLand.

Bolaspidella macgerriglei (Raymond) p. 1343 pl. cxlvi fig. 8, Wilson.

Bolaspidella sp. p. 21, Palmer (1).

Bolaspidella spp. pp. 16, 18, PALMER in Nolan et al.

Bolaspis? *resseri* p. 41, Shaw & DeLand.

Bolaspis (or *Bolaspidella*) n. sp. [undeser.] p. 46, Shaw (1).

Bonnaria gen. n. [Dorypygidae] p. 1383 for type *Bonnaria salemensis* Resser p. 1386 pl. vii figs. 11-12 Cambrian (Lower) U.S.A. (N.Y.), following spp. also assigned to *B.*—*Ptychoparia*? *clavata* Walcott [identity doubtful], *Bonniella virginica* Resser, *B.*? *hispanica* R. & E. Richter, Lochman Bull. geol. Soc. Amer. 67 10 1956.

Bonnaria cf. *B. laevigata* (Rasetti) p. 8, PALMER in Nolan et al.

Bonnaria salemensis Resser type of *Bonnaria* gen. n. [quod vide] p. 1386; *Bonnaria* sp. undet. p. 1386 pl. v fig. 11, Lochman (2).

Bonnaria sp. p. 270, Repina.

Bonnaria sp. p. 135, Repina et al.

Bonniella virginica Resser and *B.*? *hispanica* R. & E. Richter referred to *Bonnaria* gen. n. p. 1386, Lochman (2).

Bonniopsis sp. sp. p. 77, Troelsen.

Borogothus subgen. n. of *Promegaspides* [quod vide].

Bowmania americana (Walcott) p. 22, PALMER in Nolan et al.

Brachyaspidium rhynchina (Miller) p. 144, Shaw (3).

"*Brachyaspis*" *robusta* (Roem.) p. 378, Jaanusson (6).

Brachymetopina see *Brachymetopus*.

Brachymetopus maccoyi (Portlock) p. 164 pl. xliii figs. 3-4, *B. uralicus* (Verneuil) pl. xliii figs. 1-2, Weber (1).

Brachymetopus (*Brachymetopus*) *peneau* R. & E. Richter p. 37 text-figs. 8, 8a, *B.* (*Brachymetopina*?) *saminni* Oehlert 1886 a nom. nud. p. 38, Pillet.

Brassicicephalus spp. p. 21, Palmer (1).

Brevidiscus? *agnostoides* Kobayashi a synonym of *Calodiscus lobatus* (Hall) [quod vide] p. 1378, Lochman (2).

Briscoia Walcott 1925 referred to *Dikelocephalidae* p. 449, *B. perpendicularis* sp. n. Cambrian (Upper) U.S.A. (Wisconsin) p. 460 pl. xlvii figs. 1-4, Lochman J. Paleont. 30 3 1956.

Briscoia kraglievichi Rusc. text-fig. 36, Rusconi (2).

Briscoia nevadensis Resser p. 22, PALMER in Nolan et al.

Briscoia sp. A p. 99 pl. i fig. 16 Cambrian (Upper) U.S.A. (Mich.), Stumm.

Bristolia gen. n. [Olenellinae] for type *Mesonacis bristolensis* Resser lectotype chosen p. 59 text-fig. 1D, *M. insolens* R. also referred to gen., *B. sp.* for *Olenellus fremonti* Walcott partim [1910 pl. 37 figs. 16 (refigured), 19] p. 57 pl. xv fig. 7, Harrington J. Paleont. 30 1 1956.

Broeggerolithus sp. p. 386ff., Harper.

Brongniartella recorded pp. 73, 93, Kay.

Brongniartella bisulcata (Salter) p. 386 ff., *B. sp.* p. 387, Harper.

Brongniartella cf. *platynotus* p. 260, Kielan.

Brongniartella rudis (Salter) p. 394, HUPÉ in Choubert et al.

Bronteidae see *Dulanaspis* gen. n.

Bronteopsis Nicholson & Etheridge 1879 discussed and excluded from Soutelluidae p. 99, R. & E. Richter (1).

Bronteopsis? *toernquisti* (Moberg & Segerberg) holotype refigured p. 261 pl. x fig. 17, Tjernvik.

Bronteus angusticaudatus Etheridge & Mitchell 1917 probably belongs to *Kolihapeltis* p. 150, Kobayashi & Igō.

Bronteus costatus Pusch p. 6 pl. i fig. 6, *B. elegans* Peetz [Petts] p. 8 pl. i fig. 1, *B. sibiricus* Tschern. p. 9 pl. i fig. 12, *B. tullius* Hall p. 11 pl. i fig. 10, *B. arcticus* Weber 1945 [not seen] p. 12 pl. i fig. 4 text-fig. 2, *B. eugeni* Tchernysheva [not seen] holotype figured p. 13 pl. i fig. 5 text-fig. 3, *B. tenuistriatus* sp. n. p. 14 pl. i figs. 2a-6, Devonian (Middle), *B. mirabilis* sp. n. p. 15 pl. i fig. 9 Devonian (Upper), *B. signatus* Goldfuss p. 16 pl. i fig. 8, *B. pustulatiformis* sp. n. p. 17 pl. i fig. 16 Silurian (Upper), *B. aff. pustulatus* Barrande p. 18 text-fig. 4, *B. aff. bischofi* Roemer p. 19 pl. i

fig. 7, *B. sp.* No. 1 p. 20 text-fig. 5, *B. sp.* No. 2 p. 20 Silurian (Upper) U.S.S.R. (Kuznetsk); *B. radiatus* Weber 1932 (*non* Münster) stated to have been renamed by W. *B. sidereus* nom. n. p. 12 n., Chernysheva Upper Silurian and Devonian trilobites from the Kuznetsk Basin 1951.

Bronteus gigas Corda selected as type of *Dicranactis* C. 1847 and a synonym of *Scutellum* (S.) *paliferum* Beyrich 1845 p. 99, *B. granulatus* Goldfuss 1843 a synonym of *S.* (S.) *costatum* Pusch 1833 p. 96, *B. intermedius* G. 1843 (lectotype chosen) of *S.* (S.) *flabelliferum* (G. 1839) p. 96, *B. aulicus* C. 1847 selected as type of *Holomeris* C. 1847 and a synonym of *S.* (*Paralejurus*) *brongniarti* (Barrande) p. 99, *B. planus* C. 1847 type of *S.* (*Planiscutellum*) subgen. n. p. 102, *B. scaber* G. 1843 (lectotype chosen) type of *S.* (*Scabriscutellum*) subgen. n. with synonym *B. canaliculatus* G. (lectotype chosen) p. 102, *B. halli* Woodward 1910 a synonym of *S.* (*Thysanopeltis*) *acanthopeltis* (B. 1852) p. 94, R. & E. Richter (1).

Bulaispis vologdini Lerm., *B. primus* L., *B. taseevicus* Repina MS, *B. limbatus* R. MS p. 269, *B. sajanicus* R. MS p. 270, Repina.

Bulaispis [sic] p. 134, Repina et al.

Bulbaspis gen. n. [Raphiophoridae] p. 1336 for type *Ampyx bulbifer* Weber 1932, *B. ovulum* (W. 1948) text-fig. 1 (I), [where called type of *B.*], *B. sphaerornata* sp. *nondescr.* text-fig. 1 (II), *B. mirabilis* sp. *nondescr.* text-fig. 1 (III) Ordovician (Middle and Upper) U.S.S.R. (Kazakhstan), Chugaeva C.R. Acad. Sci. U.R.S.S. NS 111 6 1956.

Bumastid (pygidium) recorded p. 17, J. M. BERDAN in McAllister.

Bumastus nudus Ang., *B. macca-lumi* Salt. p. 65, V. N. WEBER in Yavorsky.

Bumastus? sp. p. 2089, Langenheim et al.

Burnetia alta Resser p. 548 pl. lxx figs. 1-3, DeLand & Shaw.

Burnetia alta p. 42, Shaw & DeLand.

Burnetia sp. pp. 19, 22, PALMER in Nolan et al.

Burnetia-like trilobite recorded p. 47, **Öpik** (3).

Bynumia p. 42, **Shaw & DeLand**.

Bynumia n. sp. [undescribed] p. 158, **SINGLETON** in **Thomas & Singleton**.

Bynumia sp. p. 36, **SINGLETON** in **Harris & Thomas**.

Bynumia sp. indet. p. 549 pl. lxiii figs. 9-11, **DeLand & Shaw**.

Bynumia ? sp. p. 21, **Palmer** (1).

Calchaquiana gen. n. [no family assigned], *C. curvata* sp. n. p. 7 fig. 6 Ordovician (Lower) Argentina (Mendoza), **Rusconi** Rev. Mus. Hist. nat. Mendoza 9 1-2 1956.

Calchaquiana curvata **Rusc.** pl. xii fig. 6, **Rusconi** (2).

Calipernurus gen. n. [Apianurinae] p. 271 for type *C. insolitus* sp. n. p. 273 pl. xxii figs. 1-7, pl. xxiii figs. 1-15, pl. xxiv figs. 1-28, text-figs. 23 (graph), 24 (reconstruction) Ordovician (Middle) U.S.A. (Va), **Whittington** Bull. Mus. comp. Zool. Harv. 114 5 1956.

Callavia sp. p. 47, **Henningsmoen** (3).

Calliops ? recorded pp. 92, 93, **Kay**.

Calliops sp. listed p. 188, *C. sticta* **Kramarenko** pl. ii fig. 3, **Ivanova** et al.

Calliops sp. p. 155, **Neuman**.

Calodiscus meeki (Ford) p. 1377 pl. vii fig. 25, *C. lobatus* (Hall) with synonym *C. agnostoides* (Kobayashi) [considered an immature form] p. 1378 pl. viii figs. 1-11 text-fig. 2 (changes in glabellar shape), *C. schucherti* (Matthew) and *C. walcotti* **Rasetti** listed p. 1354, cf. *C.* sp. undet. p. 1341, **Lochman** (2).

Calvinella recorded p. 71, **Casey & Gilbert-Tomlinson**.

Calvinella recorded p. 47, **Öpik** (3).

Calvinella tenuisculpta **Walcott** p. 22, **PALMER** in **Nolan et al.**

Calvinella wisconsinensis, *C. spiniger* p. 179, **Nelson**.

Calybole see *Cyrtosymbole*.

Calymene recorded pp. 91, 92, **Kay**.

Calymene blumenbachii rare alkali elements content table 1, **McKerrow** et al. (2).

Calymene camerata p. 1034, **Swartz & Whitmore**.

Calymene (Colpocoryphe) grandis sp. n. for *C. grandis* **Holub** 1911 MS nom. nud. Ordovician (Middle) Bohemia p. 501 (529) pl. iii figs. 1-9, **Šnajdr** Sborn. úst. Úst. geol. 22 [Pal.] 1956.

Calymene maloungaensis **Mansuy** p. 450 ff., **Yoh.**

Calymene ?? *punctata* of **Murchison** 1839 (pl. 23 fig. 8a) referred to *Encrinurus onniensis* **Whittard** p. 149, **Curtis**.

Calymene sp. listed p. 188, **Ivanova** et al.

Calymene sp. p. 155, **Neuman**.

Calymenella see *Eohomalonotus*.

Calymenella bayani **Trom.** et **Lebes.**, *C. boisseli* **Bergeron**, *C. media* **Barr.**, *C. cf. m.* p. 394, **HUPÉ** in **Choubert** et al.

Calymenid pygidium p. 388, **Harper**.

Calymenidae considered closely related to *Cheiruracea* and *Phacopacea* p. 428, **Temple** (1).

Calymmene cf. *baylei* p. 21, **Fromaget**.

Camaraspididae **Lochman** a synonym of *Pterocephaliidae* **Kobayashi** p. 458, **Lochman** (1).

Camaraspis **Ulrich & Resser** 1934 referred to *Pterocephaliidae* p. 458, **Lochman** (1).

Camaraspis recorded p. 1559, **Fisher** (1).

Camaraspis plana **Frederickson** p. 549 pl. lxvi fig. 13, pl. lxv fig. 1 *para*, **DeLand & Shaw**.

Camaraspis plana p. 41, **Shaw & DeLand**.

Camaraspoides **Frederickson** 1949 referred to *Pterocephaliidae* p. 458, **Lochman** (1).

Canotiana villavicensis **Rusc.** text-fig. 5, *C. calensis* **R.** text-fig. 6, *C. lasherensis* **R.** text-fig. 7, **Rusconi** (2).

Caphyra recorded p. 6, **P'an**.

Caphyra radians (**Barrande**) p. 390, **Harper**.

Carmon mutilus Barr. p. 258 pl. i fig. 7, pl. iii figs. 5-6, **Kielan**.

Catillicephala lata Raymond and *C. fowleri* Shaw statistical comparison pp. 1218-1221, **Shaw** (4).

Catillicephalidae (sensu Rasetti 1954) may not be homogeneous, *Celmus* cannot be referred p. 41, **Jaanusson** (4).

Cayastasia flexuosa Rusc. pl. iii fig. 10, **Rusconi** (2).

Cedaria milleri Resser p. 549 pl. lxiii figs. 13-15, **DeLand & Shaw**.

Cedaria milleri p. 42, **Shaw & DeLand**.

Cedaria puelchana Rusc. pl. vi figs. 9-11, **Rusconi** (2).

Cedariidae recorded p. 22, **Öpik** (2).

Cedarina see *Ithyektyphus* gen. n.

Cedarina cf. *C. cordilleræ* (Howell & Duncan), *C.* cf. *C. nixonia* Lochman p. 21, **Palmer** (1).

"*Cedarina*" sp. indet. p. 550 pl. lxiv figs. 14-16, **DeLand & Shaw**.

Cekovia gen. n. [Illaeninae] p. 493 (529) for type *Illaenus transfuga* Barrande 1852 lectotype chosen p. 493 pl. ii figs. 1-4 text-fig. 2 Ordovician (Middle) Bohemia, *C. distincta* (B.) and *C. salteri* (B.) so referred, **Šnajdr** Sborn. úst. Úst. geol. 22 [Pal.] 1956.

Celmidae fam. n. for *Celmus* Angelin p. 38, **Jaanusson** Bull. geol. Instn Univ. Upsala 36 1 1956.

Celmus Angelin 1854 discussed and referred to Celmidae fam. n., *Crotalurus* Volborth 1858 [quod vide] a synonym, *C. granulatus* A. 1854 lectotype chosen and figured, pygidium and hypostome assigned p. 42 pl. i figs. 1-7 text-figs. 2 A-D, *C.* aff. *granulatus* pl. i figs. 8-9, *C. barrandei* (Volborth) may be identical with *C. granulatus* p. 46 text-figs. 2E-F, *C.* sp. indet. for *C. g.* of Bohlin 1955 p. 42, **Jaanusson** (4).

Centropleura aff. *loveni* Angelin, *C. n.* sp. [undescri.] p. 20, **Öpik** (2).

Centropleura nelpecta Öpik p. 155, identification (as *C.*) doubtful p. 161, **Thomas & Singleton**.

Centropleura siberica Lermontova p. 20 pl. iv fig. 2, *C. oriens* L. MS sp. n. p. 22 pl. iii figs. 1-9 Cambrian (Middle) U.S.S.R. (Siberia), *C.* sp. pl. i fig. 9 pars, *C.* sp. pl. iv fig. 1, *C.* sp. p. 87, *C. ?* sp. p. 88, **Chernysheva** Middle Cambrian trilobites from Eastern Siberia Part I 1953.

Ceratagnostus magister Whitehouse a synonym of *Doryagnostus incertus* (Brögger) p. 14, A. H. **WESTERGÅRD** in **Öpik** (2).

Ceratarges armatus p. 372, **R. & E. Richter** (1).

Ceratevenkaspis armata Kramarenko listed p. 188, **Ivanova et al.**

Ceratocephala Warder 1838 referred to Miraspinæ, *C. laciniata* Whittington & Evitt p. 239 pl. xiv figs. 2-6, 8-15, text-figs. 2C, 16, *C. rarispina* sp. n. p. 242 pl. xv figs. 1-25, 28-29; *C. (Ceratocephalina)* subgen. n. p. 243 for type *C. (Ceratocephalina) tridens* sp. n. p. 244 pl. xvi figs. 1-24, *C. (C.)* sp. ind. p. 246 pl. xv figs. 26-27, 30 Ordovician (Middle) U.S.A. (Va); *C. asklundi* Thorslund referred to *Apianurus* gen. n. p. 271, **Whittington** Bull. Mus. comp. Zool. Harv. 114 5 1956.

Ceratocephala ceralepta Anthony 1838 considered unrecognisable p. 512, **Whittington** (3).

Ceratocephalidae see Miraspinæ.

Ceratocephalina subgen. n. of *Ceratocephala* [quod vide].

Ceratonurus Prantl & Přibyl 1949 discussed p. 250, **Whittington** (1).

Ceratopyge forficula (Sars) listed p. 277, **Tjernvik**.

Ceratopygidae discussed, relations to Housiidae and Asaphoidae p. 457 text-fig. 5, **Lochman** (1).

Ceraurid trilobites p. 172, **Neuman**.

Ceraurus intermedius Kielan p. 258, **Kielan**.

Ceraurus sp. listed p. 188 pl. iii figs. 3-4, **Ivanova et al.**

Chakasskia Poletayeva 1936-suggested reference to Protolenidae p. 449, **Lochman** (1).

Changshania see *Maladioides*.

Charabaia gen. n. [Proetidae], *C. montenegrensis* sp. n. p. 5 fig. 3 Ordovician (Lower) Argentina (Mendoza), Rusconi Rev. Mus. Hist. nat. Mendoza 9 1-2 1956.

Charabaia montenegrensis Ruso. pl. xii fig. 3, Rusconi (2).

Chasmops eichwaldi Schmidt p. 373, Jaanusson (6).

Chasmops inge Röömusoks p. 302, *C. maxima* Schm., *C. macrourus* (Sjögren) p. 303, *C. musei* Öpik p. 305, Oraspöld & Röömusoks.

Chasmops marginata Schm., *C. genuina* S., *C. emarginata* S., *C. mutica* S. pp. 22-23, *C. odini* (Eichw.) p. 24, Röömusoks (1).

Chasmops sp. p. 387, Harper.

Chaunoproetus palensis (Rud. Richter) p. 28, cf. *C. ? eurycraspedon* (R. R.) p. 25, Müller.

Cheilocephalidae fam. n. for *Cheilocephalus* p. 49, Shaw J. Paleont. 30 1 1956.

Cheilocephalus Berkeley 1898 referred to Cheilocephalidae fam. n. p. 49, *C. delandi* sp. n. Cambrian (Upper) U.S.A. (Wyoming) p. 49 pl. x figs. 1-7, pl. xi figs. 1-6, pl. xii figs. 1, 6, Shaw J. Paleont. 30 1 1956.

Cheilocephalus p. 42, Shaw & DeLand.

Cheilocephalus breviloba (Walcott) p. 20, LOCHMAN in Bridge.

Cheilocephalus sp. p. 19, PALMER in Nolan et al.

Cheiruracea discussed, close relations to Phacopacea postulated, Temple (1).

Cheiruridae — *Celmus* cannot be referred p. 41, Jaanusson (4).

Cheirurus (*Crotalocephalus*) Salter 1853 discussed with list of species p. 147, *C. (Crotalocephalus) japonicus* sp. n. for *C. sternbergi* of Kamei & Igō 1955 *partim* p. 150 pl. x figs. 1-4, *C. (C.)* sp. indt. p. 152 pl. x figs. 5 a-b text-fig. 2 Devonian Japan (Gifu), Kobayashi & Igō Japan. J. Geol. Geogr. 27 2-4 1956.

Cheirurus bimucronatus rare alkali elements content table 1, McKerrow et al. (2).

Cheirurus aff. *getasinosus* [sic] Portl., *C. sp.* pp. 65, 70, V. N. WEBER in Yavorsky.

Cheirurus sternbergi Book from Japan p. 457 text-fig., Kamei & Igō.

Cheirurus sternbergi Boeck 1833 p. 189 pl. xlviii figs. 1 a-c, 3, *C. quenstedti* Barrande 1852 p. 189 pl. xlviii fig. 2, Weber (2).

Cheirurus (*Crotalocephalus*) *sternbergi myops* p. 373, R. & E. Richter (2).

Cheirurus aff. *welleri* Raymond p. 43 pl. iii fig. 3, *C. (Crotalocephalus) myops* F. Roemer p. 44 pl. iii figs. 2, 12, text-fig. 9, *C. (C.) yavorskyi* sp. n. Devonian (Lower) p. 46 pl. iii figs. 7 a-6, text-fig. 10, *C. (C.) parvus* sp. n. Devonian (Middle) p. 48 pl. iii figs. 14 a-6 U.S.S.R. (Kuznetsk), Chernysheva Upper Silurian and Devonian trilobites from the Kuznetsk Basin 1951.

Cheirurus sp. listed p. 188, Ivanova et al.

Chilonorria zulupensis Ruso. pl. iv fig. 2, Rusconi (2).

Chittidilla plana King 1941 may be identical with *Ptychoparia richteri* Redlich 1899 p. 282, Schindewolf (2).

Chomatopyge Whittington & Evitt 1954 referred to Mesotaphraspidinae subfam. n. p. 47, Jaanusson (4).

Chondragraulos minussensis Lerm. p. 270, *C. sp.* p. 271, Repina.

Chosenia Kobayashi 1934 discussed and referred to Kaolishaniinae, *C. laticephala* K. discussed p. 14 pl. ii figs. 3 a-b (drawings), Kobayashi (1).

Chuangia nais p. 32, Fromaget.

Ciceragnostus cicer (Tullb.) p. 87, Chernysheva (2).

Clappaspis [Deiss] a synonym of *Lyriaspis* Whitehouse p. 43, Öpik (3).

Clavagnostus recorded p. 22; cephalon of *Aspidagnostus* referred to *C. p.* 21, Öpik (2).

Clavagnostus recorded p. 184, Öpik in Banks.

Clavagnostus calensis Ruso. text-fig. 3, Rusconi (2).

Clavagnostus repandus (Holm & West.) p. 87, Chernysheva (2).

Clavaspidella howelli ? (Walcott) p. 645, Hazzard & Mason.

Clelandia Cossman 1902 may belong to Mesotaphraspidinae subfam. n. p. 47, Jaanusson (4).

Cliffia latagenae [sic] (Wilson) p. 551 pl. lxxv figs. 11-12, DeLand & Shaw.

Cliffia latagenae [sic] p. 42, Shaw & DeLand.

Cobboldia dentata Lerm. p. 85, C. sp. p. 63, Suvorova (1).

Colpocoryphe see *Calymene*.

Comanchia Frederickson 1950 referred to Idahoiidae fam. n. p. 459, Lochman (1).

Conaspis considered ancestral to Ptychaspididae, Eurekiidae and Saukiidae text-fig. 3, *C. perseus* variation discussed; *Wuhuia belus* (Walcott) may be a late sp. of *C.* p. 450, Lochman (1).

Conaspis recorded p. 1559, Fisher (1).

Conocephalites ? recorded p. 174, ÖPIK in Banks.

Conocephalites ? p. 171, ÖPIK in Elliston.

Conocoryphe bufo Hicks see *Bailiaspis dalmani* Angelin.

Conocephalina discussed, *Lobocephalina* may be a congeneric geographic variant p. 453, Lochman (1).

Conolichas eichwaldi (Nieszk.) p. 305, Oraspöld & Rõõmusoks.

Coosella recorded p. 22, ÖPIK (2).

Coosella (pygidium resembling) p. 67, Casey & Gilbert-Tomlinson.

Coosella amage (Walcott), *C. andreas* (W.), *C. tennesseensis* Resser p. 20, LOCHMAN in Bridge.

Coosella cf. *C. connata* (Walcott), C. sp. p. 21, Palmer (1).

Coosella convexa Rusc. pl. vi figs. 7-8, Rusconi (2).

Coosellidae Palmer discussed and taken to include *Coosella*, *Sypacheilus* and *Coosia*; *Crepicephalus* excluded p. 458, Lochman (1).

Coosellidae Palmer—if *Crepicephalus* is included fam. should be called Crepicephalidae [quod vide] p. 1269, Rasetti (1).

Coosia — suggested that *Crepicephalus* ? *perplexus* Palmer may belong p. 458; *Coosia tokunagai* Kobayashi [type of *Mansuyella* Endo] — *Shirakiella laticonvexa* K. a synonym p. 456, Lochman (1).

Coosia recorded p. 174, ÖPIK in Banks.

Coosia recorded p. 22, ÖPIK (2).

Coosia recorded p. 53, ÖPIK (3).

Coosia alfaensis Rusc. pl. ii fig. 10, *C. huentotiana* R. pl. v fig. 4, Rusconi (2).

Coosia connata (Walcott) ? p. 551 pl. lxxvii fig. 6, *C. dakotensis* Resser p. 551 pl. lxxvii fig. 5, DeLand & Shaw.

Coosia dakotensis, *C. connata* ? p. 42, Shaw & DeLand.

Coosia robusta (Walcott) listed; *C. athletes* of Resser 1938 referred to *Maryvillia* sp. p. 20, LOCHMAN in Bridge.

Coosia sp. p. 21, Palmer (1).

Coosina gen. n. [Crepicephalidae] p. 1267 for type *Maryvillia ariston* Walcott 1916 restr. [non pl. 64 fig. 5a] with following spp. of *M.* as synonyms—*georgica* [partim], *keithi*, *masadensis* [partim], *widnerensis* Resser 1938 spp., *alberta*, *marjumentis*, *montis*, *moosensis*, *utahensis*, *wyomingensis* R. 1942 spp., *aequa* Duncan 1944, cf. *ariston* of Palmer 1955 p. 1268; *M. loperi* R. 1942 an independent sp. of *C.*, Rasetti J. Paleont. 30 5 1956.

Corbinia sp. p. 22, PALMER in Nolan et al.

Cornuproetus R. & E. Richter 1919 elevation to generic status accepted p. 352, *C. cornutus* (Goldfuss) text-fig. 3 (reconstruction), pl. i fig. 4, pl. ii fig. 9 (section), R. & E. Richter (2).

Cornuproetus see *Proetus*.

Coronocephalus rex Grabau emend. Wang p. 634 pl. iv fig. 14, Tsin.

Coronocephalus rex Gr. recorded p. 11, P'an.

Corynexochus commodus Ivsh., *C. asiatica* I. [not seen], *C.* sp. p. 7, Ivshin.

Corynexochus macrophthalmus Lermonтова MS sp. n. p. 67 pl. vi figs. 11-15 Cambrian (Middle) U.S.S.R. (Siberia), Chernysheva Middle Cambrian trilobites from Eastern Siberia Part I 1953.

Corynexochus sp. p. 36, SINGLETON in Harris & Thomas.

Corynexochus sp. p. 158, Thomas & Singleton.

Costonia gen. n. [Trinucleidae] p. 50 for type *Marrolithus ultimus* Bancroft 1949 Ordovician (Middle) Britain (Shropshire), *C.* n. sp. Dean MS [undescribed] p. 50, Whittard Palaeontogr. Soc. [Monogr.] 110 1956.

Cotalagnostus altus (Grönw.) p. 86, *C. confusus* (West.) p. 89, Chernysheva (2).

Crassifimbria [sic] sp. p. 8, PALMER in Nolan et al.

Crepicephalidae accepted as including *Crepicephalus*, *Coosia*, *Coosina* gen. n., *Coosella*, *Syspacheilus* p. 1269, considered related to *Asaphiscidae*, Rasetti (1).

Crepicephalina Endo & Resser 1937 discussed p. 62, *C. parva* sp. n. p. 63 pl. vi figs. 8-9 Cambrian (Middle) U.S.S.R. (Siberia), Chernysheva Middle Cambrian trilobites from Eastern Siberia Part I 1953.

Crepicephalina recorded p. 66, Casey & Gilbert-Tomlinson.

Crepicephalina recorded p. 19, Öpik (2).

Crepicephalus excluded from Cooselidae, *C. ? perplexus* Palmer may be an aberrant *Coosia* p. 458, Lochman (1).

Crepicephalus or closely related genus p. 52, Traves (1).

Crepicephalus or related genus p. 85, Traves (2).

Crepicephalus & *C. ?* p. 42, Shaw & DeLand.

Crepicephalus etheridgei (Chapman) p. 36, SINGLETON in Harris & Thomas.

Crepicephalus etheridgei Chapman p. 158, Thomas & Singleton.

Crepicephalus expansus, *C. rectiformis* Resser spp. p. 20, LOCHMAN in Bridge.

Crepicephalus ? wyomingensis Miller referred to *Alokistocarella* p. 144, Shaw (3).

Croixana Nelson 1951 referred to *Parabolinoidea* fam. n. p. 454, Lochman (1).

Crotalocephalus see *Cheirurus*.

Crotalurus Volborth 1858 a subjective synonym of *Celmus* Angelin 1854, *C. barrandei* V. may be a synonym of *Celmus granulatus* A., *C. barrandei* of Schmidt 1907 a different sp. from *C. granulatus* p. 46; *C. ? strigatus* Weber and *C. n. sp.* Tjernvik 1952 probably belong to *Glaphuridae* p. 39, Jaanusson (4).

Crotalurus n. sp. Tjernvik 1952 referred to *Glaphurina ? insolita* sp. n. p. 265, Tjernvik.

Cryphina gdoumontensis Asselberghs p. 59, Schmidt.

Cryphops see *Phacops*.

Cryptolithus cf. *fittsi* Ulrich & Wittington [sic] p. 56 pl. xxvi fig. 1, Ivanov & Myagkova.

'*Cryptolithus*' aff. *gibbifrons* (M'Coy) p. 387, '*C.*' sp. p. 389, Harper.

Cryptolithus (*Onnia*) *ornatus* (Sternb.) p. 488 pl. i fig. 3, Šnajdr.

Cryptolithus cf. *stelarusconii* Ruso. p. 10, Rusconi (1).

Cryptolithus sp. p. 71, *C.* listed p. 93, Kay.

Cryptolithus sp. p. 33, Nolan et al.

Cryptolithus sp. for *Trinucleus* (*C.*) *gibbosus* Elles 1940 [quod vide] *partim* from Lower Llanvirn p. 68 pl. ix fig. 16, Whittard.

Cryptonymus Eichwald 1825 (non 1840) discussed and suppression urged; *C. schlotheimii*, *C. weisii*, *C. panderii* & *C. lichtensteinii* E. 1825

(non 1860) referred to Asaphidae but considered nomina dubia; *C. rosenbergii*, *C. rudolphii* & *C. parkinsonii* E. 1825 (non 1860) referred as nomina dubia to Illaenidae; *C. wahlenbergii* E. 1825 (non 1860) with synonym *Illaeus revaliensis* Holm 1886 to *Illaeus*, Jaanusson (2).

Cryptonymus Eichwald 1840 considered nomenclatorially invalid p. 61, Jaanusson (2).

Ctenocephalus Corda 1847 discussed p. 11, *C. probus* sp. n. p. 12 pl. i figs. 7-8 Cambrian (Middle) U.S.S.R. (Siberia), Chernysheva Middle Cambrian trilobites from Eastern Siberia Part I 1953.

Ctenopyge ? p. 1348 pl. cxlvi figs. 14-15, Wilson.

Ctenopyge tumida Westergård listed p. 115, *C. spp.* p. 170, Tjernvik.

Cryanaspis empozadensis Ruse. pl. v figs. 5-7, *C. expansus* R. pl. v fig. 8, Rusconi (2).

Cybele sp. p. 388 ff., Harper.

Cybele sp. p. 70, V. N. WEBER in Yavorsky.

Cybelinae — morphology discussed p. 422 text-fig. 2 (diagrammatic), Temple (1).

Cybeloides loveni var. *girvanensis* (Reed) p. 391, Harper.

Cybiloides [sic] sp. p. 153, Neuman.

Cyclognathina semiconvexa sp. nov. [nom. nud.] p. 8, Ivshin.

Cyclopyge latifrons sp. n. p. 259 pl. x figs. 9-11 text-fig. 42A, *C. gallica* sp. n. [compared with *Symphysurus* ? Thorall 1935] p. 260 pl. x figs. 12-16 text-fig. 42B, *C. umbonata* (Angelin) text-fig. 42C Ordovician (Lower) Sweden, Tjernvik Bull. geol. Instn Univ. Upsala 36 2-3 1956.

Cyclopyge sp. [*C. aff. pachycephala* H. & C. on p. 485] p. 499, Šnajdr.

Cyclopyge sp. p. 391, Harper.

Cyclopyge sp. (sp. nov.) [undescribed] p. 258, Kielan.

Cyphaspides sp. p. 73 (80), Strnad (1).

Cyphaspis see Otarion.

Cyphaspis convexa Corda p. 37, *C. convexa* ? p. 38 pl. i fig. 17, pl. ii figs. 13a-6, Chernysheva (1).

"*Cyphaspis*" cf. *craspedota* p. 1457, *C. sp.* p. 1452, Oliver.

Cyphoniscus Salter 1853 referred to Isocolidae, *C. socialis* S. lectotype selected and figured p. 1195 pl. cxxx figs. 1-9, 11-12, text-figs. 2 a-b (drawings), Whittington (5).

Cyrtometopus Angelin 1854 discussed, *C. priscus* sp. n. including *C. cf. clavifrons* of Skjeseth 1952 p. 266 pl. xi figs. 6-8 Ordovician (Lower) Sweden, Tjernvik Bull. geol. Instn Univ. Upsala 36 2-3 1956.

Cyrtometopus gibbus Ang. var. *perconvexus* var. nov. [nom. nud.] p. 8, Ivshin.

Cyrtosymbole (*Calybole*) *antedistans* R. & E. Richter, *C. nepia* R. & E. R., *C. sp. ex aff. nepia*, ? *C. sp.* pp. 27-28, Müller.

Cyrtosymbole (*Waribole*) *avita* R. Richter text-fig. 14, *C. cf. warsteinensis* R. & E. R. p. 218, Lewowicki.

Cyrtosymbole baiburensis Weber p. 160 pl. xli figs. 16-17, *C. librovitchi* W. p. 160 pl. xlii figs. 1-4 holotypes of both spp. figured, Weber (1).

Cyrtosymbole (*Waribole*) *baiburensis* Weber p. 251 pl. i fig. 11 text-fig. 2, Balashova.

Cyrtosymbole crebra Perna 1915 p. 187 pl. xlvii figs. 4a-b, 5, Weber (2).

Dalmania exoptalma Dreyfuss type of *Phacopidina* (*Dreyfussina*) subgen. nondescript. p. 394, HUPÉ in Choubert et al.

Dalmanites socialis p. 21, Fromaget.

Dalmanites solitaria Barrande type of *Kloučekia* (*Sokhretia*) subgen. n. p. 394, HUPÉ in Choubert et al.

Dalmanites vulgaris rare alkali elements content table 1, McKerrow et al. (2).

Dalmanites weaveri (Salter) holotype and hypotypes of S. 1864 listed p. 149, *D. sp.* for *Phacops w.* of S. 1864 *partim* (pl. 3 figs. 2-3) p. 150, Curtis.

Dalmanitina mucronata (Brongniart) p. 260 pl. iv figs. 3-5, *D. cf. olini* Temple p. 261 pl. iv figs. 6-8, origin and migration of *D. mucronata* discussed p. 268, **Kielan**.

Dalmanitina proaeva proaeva (Emmr.) pl. iv figs. 10-11, pl. v fig. 4, *D. proaeva socialis* (Barrande) lectotype chosen p. 512 pl. iv figs. 1-3, *D. proaeva šilinensis* subsp. n. p. 513 (530) pl. iv figs. 4-9 Ordovician (Middle) Bohemia, **Šnajdr** Sborn. útst. Úst. geol. 22 [Pal.] 1956.

Dalmanitina cf. robertsi (Reed) p. 391, **Harper**.

Dalmanitina socialis (Barrande) protaspides described p. 106 pl. xxiv figs. 6-12 text-fig. 2, **Whittington** (2).

Damesella recorded p. 85, **Traves** (2).

Damesella brevicaudata Walcott var. p. 280 pl. xl figs. 9a-b, **Kobayashi** (2).

Damesella sp. p. 52, **Traves** (1).

Damesellidae **Kobayashi** 1935 discussed p. 9 text-fig. 1 (phylogeny), **Kobayashi** (1).

Dartonaspid knighti p. 496, **Frederickson**.

Dasometopus **Resser** 1936 discussed p. 16, *D. breviceps* (Angelin) p. 17 pl. ii figs. 1-6, **Chernysheva** (2).

Deadwoodia duris (Walcott) p. 551 pl. lxxv figs. 7-10, **DeLand & Shaw**.

Deadwoodia duris p. 41, **Shaw & DeLand**.

Dechenella (*D.*) *granulata* **Richter** lectotype figured pl. i fig. 5, **R. & E. Richter** (2).

Dechenella halli, *D. cf. macrocephalus*, *D. microgemma* p. 1452, *D. h.?* p. 1457, *D. clara* p. 1471, **Oliver**.

Dechenella minima **Okubo** MS [nom. nud.] p. 348, **Okubo** (1).

Dechenella salairica sp. n. p. 31 pl. ii figs. 2, 12, 17 Devonian (Lower and Middle), *D. batchatensis* sp. n. p. 33 pl. ii figs. 5, 8 Devonian (Middle), *D. cf. dombrowiensis* **Gürich** p. 35 text-fig. 6, *D. cf. onyx* **Richter** p. 36 pl. ii figs. 3a-6 U.S.S.R.

(**Kuznetsk**), **Chernysheva** Upper Silurian and Devonian trilobites from the **Kuznetsk Basin** 1951.

Dechenella (*Paradechenella*) sp. p. 92, **Z. M. MAKSIMOVA** in **Krivtsov**.

Deckera ? recorded p. 22, **Öpik** (2).

Deiphon — alkali metal spectrum text-fig. 1, **McKerrow** et al. (1).

Deiphon forbesi — rare alkali elements content table 1, pl. xiii fig. A (spectrum), **McKerrow** et al. (2).

Deiracephalus buttsi **Resser** p. 20, **LOCHMAN** in **Bridge**.

Dellea see *Obrucheviaspis*.

Dellea p. 42, **Shaw & DeLand**.

Dellea cf. D. butlerensis **Frederickson** p. 552 pl. lxvi figs. 1-3, *D. saginata* sp. n. [DeLand] p. 552 pl. lxvi figs. 4-7, *D. suada* (Walcott) ? p. 554 pl. lxvi figs. 8-9 Cambrian (Upper) U.S.A. (Wyoming), **DeLand & Shaw** **J. Paleont.** 30 3 1956.

Desmetia cf. annectans (Walcott) p. 22, **Nolan** et al.

Diacanthaspis **Whittington** 1941 discussed p. 207, *D. cooperi* **W.** protaspis and development described p. 211 pl. iii figs. 1-21, pl. ix fig. 6, pl. xi figs. 16-18, text-figs. 8, 9A-D, *D. lepidus* sp. n. p. 216 pl. iv figs. 1-22, pl. v figs. 1-18, pl. vii fig. 15, text-figs. 8, 10A-B (reconstruction), *D. secretus* sp. n. p. 220 pl. vi figs. 1-22, pl. vii figs. 1-14, text-figs. 8, 11A-F (protaspis and development), *D. ulrichi* sp. n. p. 225 pl. viii figs. 1-29 text-figs. 8, 12A-D (development), *D. aff. ulrichi* p. 228 pl. ix figs. 1-5, 7-9 text-fig. 8, *D. orandensis* sp. n. p. 228 pl. x figs. 1-27, pl. xi figs. 1-15, 19-20, text-fig. 8, *D. scitulus* sp. n. p. 230 pl. xii figs. 1-20, pl. xiii figs. 1-17, text-fig. 8 Ordovician (Middle) U.S.A. (Va); *Acidaspis tremenda* **Barrande** tentatively excluded from *D.* p. 210, **Whittington** **Bull. Mus. comp. Zool. Harv.** 114 5 1956.

Dianops see *Phacops*.

Diaphanometopus lineatus (**Dalman**), *D.* sp. listed p. 279, **Tjernvik**.

Dicellosephalus richmondensis **Walcott** a synonym of *Litocephalus bilobatus* (**Hall & Whitfield**) [quod vide] p. 608, **Palmer** (2).

Dicranactis Corda 1847 type species selected *Bronteus gigas* C. [quod vide], *D.* a synonym of *Scutellum* (*Scutellum*) p. 99, R. & E. Richter (1).

Dicranurus Conrad 1841 referred to Miraspinæ p. 248, *D. monstrosus* (Barrande) text-figs. 18A-C, Whittington (1).

Dicranurus Conrad 1841 discussed p. 517, *D. hamatus* (Hall 1859) p. 518 pl. lx figs. 9, 11-15, *D. monstrosus* (Barrande) text-figs. 4 A-C, Whittington (3).

Digonus see *Homalonotus*.

Dikellocephalus bilobatus Hall & Whitfield see *Litocephalus*.

Dikellocephalus lodensis Whitfield affirmed as type of *Saukia* [quod vide], *D. lodensis* of W. 1882 *partim* (pl. 27 fig. 13) referred to *Tellerina crassimarginata* (W.) p. 452, Lochman (1).

Dikelocephalid recorded p. 174, ÖPIK in Banks.

Dikelocephalid type trilobites p. 53, Traves (1).

Dikelocephalidae Miller 1889 discussed and taken to include *Briscoia*, *Dikelocephalus*, *Elkia*, *Osceolia* and *Walcottaspis*, classification of family into Dikelocephalinae and Osceolinae rejected p. 449, evolution text-fig. 2, Lochman (1).

Dikelocephalids recorded p. 53, ÖPIK (3).

Dikelocephalites Sun 1935 referred to Pterocephaliidae p. 458, Lochman (1).

Dikelocephalus thwaitesi p. 177 ff., *D.* sp. p. 178 ff., *D. minnesotensis*, *D. oweni*, *D. marginatus* p. 179, Nelson.

Dikelocephalus recorded p. 47, ÖPIK (3).

Dikelocephalina dicraeura (Angelin) listed p. 278, Tjernvik.

Dikelocephalinidae discussed and considered related to Asaphoidae p. 453 text-fig. 5, Lochman (1).

Dimeropygidae see Mesotaphrasinae subfam. n.

Dindymene ornata Linnarsson p. 258 pl. iii figs. 1-2, *D. pulchra* Olin p. 258 pl. ii fig. 1, Kielan.

Dindymene cf. *ornata* (Linnarsson) p. 389, *D. cordai* Nich. & Eth. p. 391, Harper.

Dinesus ida Etheridge p. 155, *D.* sp. p. 156, Thomas & Singleton.

Dinesus ida Etheridge p. 17, ÖPIK (2).

Dinesus kirghizensis Lerm. p. 7, Ivshin.

Dionide cf. *richardsoni* Reed, *D. lapworthi* Nich. & Eth. p. 391, Harper.

Diplagnostus indianus Rusc. pl. i fig. 13, Rusconi (2).

Diplagnostus (*Linguagnostus*) *kasachstanensis* Ivsh. [not seen] p. 7, Ivshin.

Diplagnostus sp. p. 179, ÖPIK in Banks.

Diplagnostus sp. p. 12, PALMER in Nolan et al.

Diplapatokephalus finalis p. 27, Nolan et al.

Diplapatokephalus sp. p. 27, COOPER in Nolan et al.

Ditomopyge olsoni — apparent decrease during ontogeny in the ratio of pleural to axial segments in pygidium (Weller 1937) statistically not significant, correlation of genal spine and cheek lengths significant p. 1216 table 3, Shaw (4).

Ditomopyge sp. undet. p. 37, *D.* sp. undet. p. 39, WILLIAMS in Gilluly et al.

Dokimocephalidae — *Aldanaspis* Lermontova 1940 referred p. 57, Chernysheva (2).

Dokimocephalus pernasutus (Walcott) p. 19, PALMER in Nolan et al.

Doryagnostus incertus (Brögger) — *Ceratagnostus magister* Whitehouse a synonym p. 14, A. H. WESTERGÅRD in ÖPIK (2).

Dorypyge recorded p. 286, C. J. STUBBLEFIELD & O. P. SINGLETON in Benson.

"*Dorypyge*" *quadriceps* (Hall & Whitfield) p. 645, Hazzard & Mason.

Dorypyge n. sp. [undescrib.] p. 156, Thomas & Singleton.

Dorypyge sp. p. 12, PALMER in Nolan et al.

Dorypygella sp. nov. p. 280 pl. xl fig. 11 text-fig., Kobayashi (1).

Dorypygellinae — *Teinistion* and *Shantungia* referred p. 9, Kobayashi (1).

Dorypygidae see *Bonnaria* and *Fordaspis* gen. n.

Drepanura ketteleri Monke var. including *Teinistion typicalis* Kobayashi 1931 (non M.) partim (pl. 20 fig. 17) p. 280 pl. xl fig. 10, Kobayashi (2).

Drevermannia cf. *brecciae* Richter p. 22, *D.* sp. p. 25, Müller.

Dreyfussina subgen. nondescr. of *Phacopidina* [quod vide].

Drumaspis sp. p. 496, Frederickson.

Drumaspis sp. p. 21, Palmer (1).

Drummuckaspis Prantl & Přibyl 1949 a subjective synonym of *Proceratocephala* P. & P. 1949 [quod vide] p. 515, Whittington (3).

Dudleyaspis Prantl & Přibyl 1949 referred to *Odontopleurinae* and discussed p. 234, *D. quinquespinosa* (Lake) text-figs. 14A–B, Whittington (1).

Dudleyaspis quinquespinosa (Lake 1896) lectotype selected p. 513 pl. lviii figs. 5, 15, 16, text-figs. 2A–B, Whittington (3).

Dulanasams misspelling of *Dulanaspis* gen. n. p. 1337, Chugaeva.

Dulanaspis [spelt *Dulanasams* at descr.] gen. n. [Bronteidae] for type *D. levis* sp. n. p. 1337 text-fig. 2 Ordovician (Upper) U.S.S.R. (Kazakhstan), Chugaeva C.R. Acad. Sci. U.R.S.S. NS 111 6 1956.

Dunderbergia canadensis Kobayashi p. 1346 pl. cxlvi fig. 22 pars, Wilson.

Dunderbergia halli Resser, *D. nitida*, *D. simulator*, "*D.*" *granulosa* (Hall & Whitfield spp.) p. 19, *D. maculosa* (H. & W.) p. 22, PALMER in Nolan et al.

Dysplanus ? spp. no. 1 and no. 2 p. 264, Tjernvik.

Dytremacephalus Palmer 1954 [recte 1955] referred to *Pterocephaliidae* p. 458, Lochman (1).

Dytremacephalus recorded p. 539, F. F. SABINS in Lochman (4).

Dytremacephalus [cf. on pl. expl.] *laevis* Palmer p. 1347 pl. cxlvi fig. 13, Wilson.

Eccoptochile (E.) *clavigera* (Beyrich) lectotype chosen p. 507 pl. i fig. 2, pl. v fig. 8, *E. (Eccoptochiloides) tumescens* (Barrande) lectotype chosen, *E. (Eccoptochiloides)* sp. p. 508 pl. iii fig. 10, *Eccoptochile* sp. pl. iv fig. 12, Šnajdr.

Eccoptochiloides see *Eccoptochile*.

Ectenonotus cf. *E. raymondi* Hollday p. 2089, Langenheim et al.

Ectenonotus cf. *E. westoni* (Billings) p. 29, Nolan et al.

Edelsteinaspis cf. *ornata* Lerm. p. 96, Suvorova (1).

Edelsteinaspis ornatus Lerm. p. 270, Repina.

Edelsteinaspis sp. p. 135, Repina et al.

Edgellia Shaw 1950 a junior objective synonym of *Trinucleus* Murchison 1839 [quod vide] p. 51, Stubblefield & Whittington.

Edgellia Shaw 1950 a synonym of *Trinucleus* Murchison 1839 since its type *T. fimbriatus* M. is considered (designation of Vogdes 1890) to be type of *T.* p. 45, Whittard.

"*Ehmania*" *tetonensis* p. 41, Shaw & DeLand.

Ehmania weedi Resser p. 144, Shaw (3).

Ehmania sp. p. 21, Palmer (1).

Ehmania ? sp. p. 2497 pl. i figs. 4–5, PALMER in Palmer & Hazzard.

Eifliarges caudimirus p. 372, R. & E. Richter (2).

Ekeraspis subgen. n. of *Plesiomasgalaspis* [quod vide].

Eldoradia prospectensis (Walcott), *E. linnarssoni* (W.) p. 16, PALMER in Nolan et al.

Eldoradia sp. p. 21, Palmer (1).

Elkia Walcott 1925 referred to Dikelocephalidae with synonym *Parabriscoia* Kobayashi 1935, *E. nasuta* W. with synonym (based on association of cranidia and pygidia) *P. dolichorachis* K. p. 449 pl. xlvii figs. 5-14, Lochman (1).

Elkia nasuta (Walcott) (= *Parabriscoia* spp. of Kobayashi) p. 22, PALMER in Nolan et al.

Elleipsocephalus Zenker 1833—proposed approval of Emmrich's 1839 emendation to *Elleipsocephalus* [quod vide], Poulsen (2).

Elleipsocephaloides p. 42, Shaw & DeLand.

Elleipsocephaloides sp. p. 496, Frederickson.

Elleipsocephaloides sp. p. 21, Palmer (1).

Elleipsocephaloides sp. indet. p. 554 pl. lxxvii fig. 1, DeLand & Shaw.

Elleipsocephalus Zenker 1833—proposed approval of Emmrich's 1839 emendation from *Elleipsocephalus*, and placing on Official List of Generic Names, *E. ambiguus* Z. a subjective synonym of *E. haffi* (Schlotheim 1823) p. 132, *E. nanus* Barrande 1846 of *Sao hirsuta* B. 1846 p. 131, Poulsen (2).

Elleipsocephala asaphoides Emmons p. 1376 pl. vi figs. 2-21 [including protaspides], *E.* sp. undet. listed p. 1341, Lochman (2).

Elrathia cf. *E. kingi* (Meek) p. 651, *E.* sp. p. 646, Hazzard & Mason.

Elrathia ? *occidentalis* (Walcott) p. 12, PALMER in Nolan et al.

Elrathiella spp. p. 16, PALMER in Nolan et al.

Elrathina recorded p. 43, Öpik (3).

Elrathina (undescribed) p. 17, Öpik (2).

Elrathina spp. p. 12, PALMER in Nolan et al.

Elvinia recorded p. 1559, Fisher (1).

Elvinia obliquoensis Rusc. pl. iv fig. 1, Rusconi (2).

Elvinia roemeri (Shumard) pp. 19, 22, PALMER in Nolan et al.

Elvinia tetonensis p. 41, Shaw & DeLand.

Elvinia n. sp. [undescribed] p. 10, A. R. PALMER in McAllister.

Elvinia sp. p. 2497 pl. i figs. 1-2, PALMER in Palmer & Hazzard.

Elvinia sp. indet. p. 554 pl. lxxvii figs. 9-10, pl. lxxv fig. 1 *pars*, DeLand & Shaw.

Elvinia ?-like trilobite p. 23, Öpik (2).

Encrinurinae — morphology discussed p. 423 text-fig. 2 (diagrammatic), Temple (1).

Encrinurus Emmrich 1844—proposed to be placed on Official List of Generic Names and type species to be designated as *Entomostracites punctatus* Wahlenberg 1821 (*non* Brünnich 1781) [quod vide] lectotype selected and figured p. 260 pl. iii figs. 1-2, Tripp & Whittard.

Encrinurus Emmrich 1844—de facto type taken as *Entomostracites punctatus* Wahlenberg *non* Brünnich p. 58, *E.* sp. p. 59 pl. xxv fig. 3, Ivanov & Myagkova.

Encrinurus recorded p. 93, Kay.

Encrinurus cf. *multisegmentatus* (Portl.) p. 379, Jaanusson (6).

Encrinurus onniensis Whittard for *Calymene* ?? *punctata* of Murchison 1839 (pl. 23 fig. 8a) p. 149, Curtis.

Encrinurus punctatus rare alkali elements content table 1, McKerrow et al. (2).

Encrinurus punctatus var. *laosensis* p. 21, Fromaget.

Encrinurus rex Grabau p. 33, Chow.

Encrinurus cf. *seebachi* Fr. Schmidt p. 90 pl. i fig. 1, Martinsson.

Encrinurus sulfureanus Rusc. pl. x fig. 8, Rusconi (2).

Encrinurus sp. p. 7, Rusconi (1).

Endoaspis gen. n. (nom. n. for *Wutingia* Endo 1935 *non* Melichar 1926) for type *W. rectangulosa* E. Ordovician (Lower) Manchuria p. 448, Lochman J. Paleont. 30 3 1956.

Endocrania gen. n. [Kaolishaninae] p. 16 for type *Hystericurus convexus* Endo 1935, Kobayashi Japan. J. Geol. Geogr. 27 1 1956.

Entomolithus Linnaeus 1759 suppression urged, *E. paradoxus* L. 1759 (non 1753 which has no status) suppression urged as it may be a senior synonym of *Entomostracites spinulosus* Wahlenberg 1821 [which is the type of *Parabolina*], Poulsen (1).

Entomostracites Wahlenberg 1821 proposed suppression, *E. paradoxissimus* W. 1821 [lectotype selected] with objective synonym *Paradoxides tessini* Brongniart 1822 type of *Paradoxides* B. 1822 (selection of type attributed to Barrande 1852), *E. gibbosus* W. 1821 proposed as type of *Olenus* Dalman 1827, *E. spinulosus* W. 1821 type of *Parabolina* Salter 1849, Poulsen (1).

Entomostracites expansus Wahlenberg 1821 [so attributed rather than to Linnaeus 1768 or Dalman] lectotype selected, proposed as type species of *Asaphus* Brongniart 1822, Jaanusson (3).

Entomostracites extenuatus Wahlenberg 1821 type of *Megistaspis* (*Megistaspidella*) subgen. n. p. 71, Jaanusson (5).

Entomostracites punctatus Wahlenberg 1821—proposed to be validated (by suppressing *Trilobus punctatus* Brünnich 1781) and to be designated as type of *Encrinurus* Emmrich 1844, Tripp & Whittard.

Eobronteus Reed 1928 discussed p. 103, *E. laticauda* (Wahlenberg 1818) pl. i fig. 1 (drawings), pl. iii figs. 11–15, R. & E. Richter (1).

Eobronteus laticauda (Wahlenb.) p. 375, Jaanusson (6).

Eodiscus Matthew 1896 so referred and type taken to be *Microdiscus schucherti* M. p. 5, *E. punctatus* (Salter) with synonym *M. eucentrus* Linnarsson p. 6 pl. i figs. 1–3, *E. palmatus* sp. n. Cambrian (Middle) U.S.S.R.: (Siberia) p. 8 pl. i fig. 4, Chernysheva Middle Cambrian trilobites from Eastern Siberia Part I 1953.

Eodiscus ? (undescribed) p. 17, Öpik (2).

Eodiscus cf. *E. punctatus* (Salter) listed p. 1342 pl. v figs. 22–23, Lochman (2).

Eohomalonotus (E.) *bohemicus* (Barrande), *E. (E.) draboviensis* (Novák), *E. (Calymenella) parvulus* (B.) p. 506, *E. (C.) aff. parvulus* p. 507, Šnajdr.

Eohomalonotus vicaryi (Salter) p. 394, Hupé in Choubert et al.

Eosaukia ? *walcotti* (Mansuy) for *Ptychaspis* w. M. p. 281 pl. xl figs. 1–4, Kobayashi (2).

Erbia granulosa Lerm., *E. sibirica* L., *E. ex gr. s.* p. 271, Repina.

Esmeraldina Resser & Howell 1938—assignment of *Wanneria occidentis* Walcott doubtful p. 61, Harrington.

Eteraspis p. 42, Shaw & DeLand.

Euarges see *Lichas*.

Euarges contusus p. 1452, Oliver.

Euarges parvula Novák 1884 p. 188 pl. xlvii figs. 11a–b, Weber (2).

Eugonocare Whitehouse 1939—relations to *Olenaspella* gen. n. p. 1345, Wilson.

Eugonocare recorded p. 22, Öpik (2).

Eugonocare sp. p. 36, SINGLETON in Harris & Thomas.

Eugonocare sp. p. 158, Thomas & Singleton.

Eugonocare ? sp. p. 368 (376) pl. i figs. 3–4, Lu (2).

Euloma laevis Angelin discussed and lectotype selected and figured p. 274 pl. xi figs. 1–3 text-fig. 45B, *E. ornatum* A. p. 275 pl. xi figs. 4–5 text-fig. 45A, *E. spp.* no. 1 and no. 2 p. 276 Ordovician (Lower) Sweden, Tjernvik.

Euloma ordinata sp. nov. [nom. nud.] p. 8, Ivshin.

Euplethagnostus Lermontova 1940 a synonym of *Pseudagnostus* p. 12, Ivshin.

Euptychaspis kirki Kobayashi p. 22, PALMER in Nolan et al.

Eurekia angustifrons (Walcott), *E. dissimilis* (W.), *E. granulosa* W., *E. sp.* p. 22, PALMER in Nolan et al.

Eurekia sp. p. 179 ff., Nelson.

Eurekia-like new genus [undeser.] Ordovician (Lower) U.S.A. (Nevada), COOPER in Nolan et al.

Eurekiidae discussed and taken to include *Eurekia*, *Bayfieldia*, *Corbinia*, *Maladia* and *Tostonia* p. 450 text-fig. 3, LOCHMAN (1).

Eurostina trigona Whitehouse p. 40, ÖPIK (3).

Evenkaspis marina Kramarenko pl. iii fig. 6, *E. ivanovae* K. listed p. 188, *E.* sp. pl. iv fig. 6 pars, IVANOVA et al.

Fabulaspis famosus Ivsh. [not seen] p. 7, IVSHIN.

Falanaspis gen. n. [Selenecemidae] p. 272 for type *F. aliena* sp. n. p. 273 pl. xi figs. 19–21 text-fig. 44 Ordovician (Lower) Sweden, Tjernvik Bull. geol. Instn Univ. Upsala 36 2–3 1956.

Fieldaspis minuta Ruso. pl. ii fig. 5, RUSCONI (2).

Flexicalymene figured text-figs., GERARD.

Flexicalymene planimarginata (Reed) p. 387, *F.* [aff. added by hand in offprint from author] *quadrata* (King) p. 391, HARPER.

Flexicalymene sp. rare alkali elements content table 1, MCKERROW et al. (2).

Forchhammeria elegans Lerm. and Tchern. [Chern.] [not seen] p. 72 pl. vii figs. 5–7, CHERNYSHEVA (2).

Fordaspis gen. n. [Dorpygididae] p. 1387 for type *Solenopleura nana* Ford 1878 holotype figured [records of Walcott 1886, 1891, and Resser 1937 excluded] p. 1387 pl. vii figs. 21–24, pl. viii figs. 12–22 Cambrian (Lower) U.S.A. (N.Y.), cf. *F. nana* for *Atops trilineatus* of F. 1875 (refigured) p. 1389 pl. vii figs. 26–27, *F. tumida* (Walcott) for *S. ?? tumida* W. 1887 holotype refigured p. 1390 pl. vii figs. 19–20, *F.* sp. undet. listed p. 1342, LOCHMAN Bull. geol. Soc. Amer. 67 10 1956.

Fouchovia [sic] recorded p. 63, CASEY & GILBERT-TOMLINSON.

Fremontella gen. n. [Olenellinae] for type *Wanneria halli* Walcott lectotype chosen and refigured p. 58 pl. xv figs. 1–3, 8–9 text-fig. 1C, HARRINGTON J. Paleont. 30 1 1956.

Fremontia Raw 1936 discussed, *F. fremonti* Walcott lectotype selected and sp. restricted p. 57 pl. xv fig. 6 text-fig. 1B; following spp. also referred to *F.*—*Olenellus canadensis* Walcott lectotype selected and sp. restricted [1910 pl. 38 figs. 4, 5, 7 excluded], *O. brevoculus* Resser & Howell, *Wanneria walcottana buelnaensis* Lochman as *F. b.* p. 58, HARRINGTON.

Fuchovia 2 spp. p. 10, ÖPIK (2).

Fuchovia n. sp. [undeser.] p. 156, THOMAS & SINGLETON.

Fuchovia ? listed p. 41, ÖPIK (3).

Gallagnostus solitariensis Ruso. text-figs. 2a–b, RUSCONI (2).

Genevievella see *Ninaspis* gen. n.

Genevievella marionensis Resser p. 20, LOCHMAN in Bridge.

Genevievella ? sp. p. 21, PALMER (1).

Geragnostus see *Agnostus*.

Geragnostus bisectus (Matthew) vars. *typica* and *brevis* differ significantly in cephalic measurements, suggested interpretation as difference in sex p. 1222 tables 8–9 text-fig. 2, SHAW (4).

Geragnostus jahuelensis Ruso. text-figs. 1a–b, RUSCONI (2).

Geragnostus olentensis sp. nov. [nom. nud.], *G. ex gr. sidenbladi* (Linsr.) p. 8, IVSHIN.

Geragnostus rudis Salter pl. cxlvi fig. 11, *G. cranidia* p. 1348; *G. "cranidium"* of Wilson 1954 (pl. 26 fig. 16) is a pygidium p. 1347, WILSON.

Geragnostus sidenbladi (Linnarsson) types apparently lost p. 188 pl. i figs. 5–6 text-fig. 27A, *G. crassus* sp. n. for *Agnostus glabratus ingricus* of Wiman 1905 (*non* Schmidt) p. 190 pl. i figs. 7–8 text-fig. 27B, *G.* sp. aff. *crassus* for *G.* sp. Regnéll 1942 *partim* p. 191, *G. lepidus* sp. n. p. 191 pl. i figs. 9–10 text-fig. 27C, *G. wimani* sp. n. for *A. glabratus* of W. 1905 (*non* Angelin)

p. 192 pl. i figs. 11–12 text-fig. 27D, *G. explanatus* sp. n. p. 193 pl. i figs. 13–14, *G. toernquisti* (Holm) p. 194, *G. sp.* no. 1 p. 194, *G. sp.* no. 2 p. 194 pl. i fig. 15 Ordovician (Lower) Sweden, Tjernvik Bull. geol. Instn Univ. Upsala 36 2–3 1956.

Geragnostus tumidosus (Hall & Whitfield) pp. 19, 22, *G. brevis* Palmer, *G. sp.* p. 22, PALMER in Nolan et al.

Gerastos Goldfuss 1843 discussed and considered a synonym of *Proetus* Steininger 1831 to which its type *G. laevigatus* G. (which is an objective synonym of *P. cuvieri* S.) is referred p. 351, *G. granulosus* G. (lectotype chosen and figured) a subjective synonym of *P. cuvieri* p. 367, R. & E. Richter (2).

Glaphuridae discussed and considered not related to Telephidae and Komaspidae, assignment of *Glaphurina* uncertain; *Crotalurus* n. sp. Tjernvik 1952 and *C. strigatus* Weber probably belong to Glaphuridae p. 39, Jaanusson (4).

Glaphurina discussed, assignment to Glaphuridae uncertain p. 39, Jaanusson (4).

Glaphurina? insolita sp. n. for *Crotalurus* n. sp. Tjernvik 1952 p. 265 pl. x figs. 20–21 Ordovician (Lower) Sweden, Tjernvik Bull. geol. Instn Univ. Upsala 36 2–3 1956.

Globulaspis Reed 1931 may not be an Odontopleurid p. 283, Whittington (1).

Glossopleura lodensis see *Bathyriscus howelli* var. *lodensis*.

Glossopleura mohavensis Resser referred to *Sonoraspis* p. 680, Stoyanow.

Glossopleura pedemontana Rusc. pl. i fig. 15, Rusconi (2).

Glossopleura sp. p. 645, Hazzard & Mason.

Glyphanellus see *Glyphaspellus*.

Glyphaspellus primus Ivsh., *G. latus* I., *G. rimus* I., *G. (Glyphanellus) margoritus* I. [none seen] p. 7, Ivshin.

Glyphaspis tetonensis p. 41, Shaw & DeLand.

Glyphaspis sp. p. 21, Palmer (1).

Glyptagnostus reticulatus (Angelin) from Nevada p. 22, PALMER in Nolan et al.

Glyptagnostus reticulatus (Angelin) from Queensland p. 23, Öpik (2).

Glyptagnostus reticulatus (Ang.) from Tasmania p. 52, Öpik (3).

Glyptagnostus reticulatus p. 181, ÖPİK in Banks.

Goldius elegans Peetz 1901 p. 187 pl. xlvii fig. 6, *G. naliivkini* Weber 1932 p. 187 pl. xlvii fig. 7, *G. yakovlevi* W. 1932 p. 188 pl. xlvii fig. 8, *G. costatus* Pusch p. 188 pl. xlvii figs. 9–10, Weber (2).

Goniagnostus nathorsti (Brögger) from Queensland p. 16, Öpik (2).

Goniagnostus nathorsti (Brögg.) p. 89, *G. n. var. rostrata* Lerm. p. 88, Chernysheva (2).

Goniagnostus cf. nathorsti (Brögger) p. 286, C. J. STUBBLEFIELD in Benson.

Goniagnostus verrucosus Rusc. text-fig. 19, *G. rotundatus* R. text-fig. 20, *G. tenuatus* R. pl. ii fig. 13, Rusconi (2).

Goniagnostus? sp. p. 12, PALMER in Nolan et al.

Goycoia tellecheai Rusc. text-fig. 8, *G. limpida* R. text-fig. 9, Rusconi (2).

Grandagnostus glandiformis (Ang.) p. 88 pl. i fig. 9 *pars*, Chernysheva (2).

Granularia protolenorum Lerm. p. 85, *G. sp.* p. 63, *G. illustrated* pl. 2 fig. 4 *partes* 6, B, Suvorova (1).

Granularia sp. p. 135, Repina et al.

Granularica [sic] *obrutchevi* Polet. p. 271, Repina.

Griffithides claviger Seupin 1902 p. 163 pl. xlii figs. 19–20, *G. longiceps* var. *angusta* Woodward [cf. on pl. expl.] pl. xlii fig. 21, Weber (1).

Griffithides aff. *G. ornatus* Vogdes, *G. sp.* p. 43, GERTY in Hewett.

Hamashania pulchra Kobayashi may belong to *Mareda* p. 448, Lochman (1).

Hamptonella Resser 1937 a synonym of *Kochiella* Poulsen [1927] to which its type *Ptychoparia fitchi* Walcott is referred p. 1392, **Lochman** (2).

Hamptonella gen. n. [no family assigned] p. 13 for type *Ptychoparia fitchi* Walcott, **C. E. Resser** Smithsonian. misc. Coll. 95 22 1937.

Hamtonella gen. n. error pro *Hamptonella* gen. n. Resser 1937, Z. R. 74 for 1937 11 1938 p. 35.

Haniwa ? recorded p. 67, **Casey & Gilbert-Tomlinson**.

Haniwa conica Kobayashi p. 280 pl. xl fig. 8, **Kobayashi** (2).

"*Harpes*" *costatus* Ang. p. 374, **Jaanusson** (6).

Harpes neogracilis R. & E. Richter 1924 p. 73 (80), **Strnad** (1).

Harpes reticulatus Corda p. 5 pl. i fig. 3 text-fig. 1, **Chernysheva** (1).

Harpes reticulatus Corda var. *altaica* Tschernyschew 1893 p. 186 pl. xlvii fig. 1, **Weber** (2).

Harpes wegelini ? Ang., *H.* sp. p. 65, V. N. **WEBER** in **Yavorsky**.

Harpides mediasiaticus sp. nov. [nom. nud.] p. 8, **Ivshin**.

Harpides rugosus (Sars & Boeck), *H.* spp. p. 268, **Tjernvik**.

Hemiarges recorded p. 92, **Kay**.

Hemirhodon serranus Rusc. pl. ii fig. 9, **Rusconi** (2).

Holcacephalus ? p. 22, **Öpik** (2).

Holcacephalus appalachius Resser, *H. tenerus* (Walcott) p. 21, **Palmer** (1).

Holdenia Cooper 1953 referred to *Isocolidae*, *H. typa* C. types refigured p. 1197 pl. cxxix figs. 12-17, pl. cxxx figs. 10, 13-15, text-figs. 3a-b (drawings), **Whittington** (5).

Holmia mickwitzi (Schmidt) Estonian forms discussed p. 116, **Öpik** (1).

Holmia cf. *mickwitzi* p. 47, **Henningsmoen** (3).

Holomeris Corda 1847 type species selected *Bronteus aulicus* C. [quod vide], *H.* a synonym of *Scutellum* (*Paralejurus*) C. p. 99, **R. & E. Richter** (1).

Holometopus see *Raymondaspis*.

Holotrachelus punctillosus Törnqu. p. 65, V. N. **WEBER** in **Yavorsky**.

Holteria recorded p. 20, *H.* ? p. 22, **Öpik** (2).

Holteria problematica (Walcott) p. 18, **PALMER** in **Nolan et al.**

Homagnostus recorded p. 23, **Öpik** (2).

Homagnostus ? recorded p. 173, **ÖPIK** in **Banks**.

Homagnostus tentatively identified p. 168, **ÖPIK** in **Elliston**.

Homagnostus acutus pl. cxlvi fig. 22 pars, **Wilson**.

Homagnostus jarillensis Rusc. text-fig. 35, *H. pehuenchensis* R. pl. iii fig. 1, *H. asperoensis* R. pl. iv fig. 14, **Rusconi** (2).

Homalonotus (*Digonus*) cf. *rudersdorfensis* R. & E. Richter pp. 94, 97, R. & E. **RICHTER** in **Schmidt**.

Homalopyge gen. n. [Asaphid] p. 73 for type *Asaphus stacyi* Schmidt 1898 Ordovician (Lower) Baltic & Sweden text-figs. 3A-B, **Jaanusson** Bull. geol. Instn Univ. Upsala 36 1 1956.

Homolichas see *Hoplolichas*.

Hoplolichas (*Homolichas*) *angustus* (Beyr.) p. 373, **Jaanusson** (6).

Housia vacuna (Walcott) ? p. 555 pl. lxvi fig. 14, **DeLand & Shaw**.

Housia vacuna ? p. 42, **Shaw & DeLand**.

Housia spp. p. 19, **PALMER** in **Nolan et al.**

Housiidae — possible relations to *Asaphidae* and *Ceratopygidae* p. 457 text-fig. 5, **Lochman** (1).

Huaquinchia spinosa Rusc. pl. vii fig. 7, **Rusconi** (2).

Huaragnostus huarpeanus Rusc. text-fig. 34, **Rusconi** (2).

Huilichia trispinata Rusc. pl. i fig. 6, **Rusconi** (2).

Hungaia puelchana Rusc. pl. iii figs. 2-3, **Rusconi** (2).

Hungaia ? sp. p. 22, **PALMER** in **Nolan et al.**

Hungaiidae discussed p. 453, **Lochman** (1).

Hunnebergia gen. n. [Asaphidae] for type *H. retusa* sp. n. p. 257 pl. x figs. 5-6 text-fig. 41B Ordovician (Lower) Sweden, Tjernvik Bull. geol. Instn Univ. Upsala 36 2-3 1956.

Hypagnostus andinus Rusc. pl. i fig. 12, *H. empozadensis* R. pl. iv fig. 11, *H. lasherensis* R. pl. iv fig. 12, *H. huilichensis* R. pl. vii fig. 12, Rusconi (2).

Hypagnostus parvifrons (Linnarsson) p. 12, PALMER in Nolan et al.

Hypagnostus sublatus Ivsh. [not seen] p. 7, Ivshin.

Hypagnostus truncatus (Brögg.) p. 86, *H. parvifrons* (Linnr.) p. 87, *H. brevifrons* (Ang.) p. 88, Chernysheva (2).

Hypagnostus n. sp. [undescri.] p. 158, SINGLETON in Thomas & Singleton.

Hypagnostus spp. p. 36, SINGLETON in Harris & Thomas.

Hysteropleura p. 42, Shaw & DeLand.

Hystericuraspis probus gen. et sp. nov. [nom. nud.] p. 8, Ivshin.

Hystericurus recorded p. 936, Sando.

Hystericurus convexus Endo 1935 type of *Endocrania* gen. n. p. 16, Kobayashi (1).

Hystericurus corralensis Rusc. text-fig. 41, Rusconi (2).

Hystericurus tuberculatus (Walcott) p. 11, J. BRIDGE & G. A. COOPER in McAllister.

Hystericurus sp. p. 27, COOPER in Nolan et al.

Hystericurus spp. p. 49, Bridge.

Idahoia Walcott 1925 referred to *Idahooidae* fam. n. p. 459, Lochman (1).

Idahoia see *Olentella* gen. n.

Idahoia p. 42, *I. wyomingensis* p. 41, Shaw & DeLand.

Idahoia ? recorded p. 53, Öpik (3).

Idahoia sp. A p. 99 pl. i fig. 17 Cambrian (Upper) U.S.A. (Mich.), Stumm.

Idahoia sp. indet. p. 555 pl. lxvii fig. 2 pars, DeLand & Shaw.

Idahooidae fam. n. for *Idahoia*, *Bellaspidea*, *Comanchia*, *Pseudosaratogia*, *Saratogia* and *Wilbernia* p. 459 text-fig. 7, Lochman J. Paleont. 30 3 1956.

Idamea recorded p. 22, Öpik (2).

Iddingsia p. 42, Shaw & DeLand.

Iddingsia nevadensis Resser, *I. robusta* (Walcott), *I. similis* (W.) p. 19, PALMER in Nolan et al.

Iddingsia occidentalis sp. n. p. 555 pl. lxxv fig. 14 Cambrian (Upper) U.S.A. (Wyoming), DeLand & Shaw J. Paleont. 30 3 1956.

Idiomesus sp. p. 22, PALMER in Nolan et al.

Illaenid trilobites (various) p. 33, Nolan et al.

Illaenidae Hawle & Corda 1847—three Eichwald 1825 spp. of *Cryptonymus* [quod vide] referred as nomina dubia p. 60, Jaanusson (2).

Illaeninae see *Zbirovia* and *Cekovia* gen. n.

Illaenus quadratus p. 177 ff., *I. calvini* p. 179, *I. sp.* p. 180 ff., Nelson.

Illaenus Dalman 1827—proposed addition to Official List of Generic Names and protection by the suppression of *Cryptonymus* Eichwald 1825 [quod vide]; *I. wahlenbergi* (E. 1825) for *C. w. E.* with synonym *I. revaliensis* Holm 1886, Jaanusson (2).

Illaenus recorded p. 92, Kay.

"*Illaenus*" *holubi* sp. n. p. 495 (529) pl. i fig. 1 Ordovician (Middle) Bohemia; *I. panderi* Barrande with synonyms *I. laticeps* and *I. attenuatus* Hawle & Corda referred to *Stenopareia* p. 496, *I. aratus* Barrande type of *Zbirovia* gen. n. [quod vide] p. 490, *I. transfuga* B. type of *Cekovia* gen. n. to which are referred *I. distinctus* B. and *I. salteri* B. p. 493, Šnajdr Sborn. úst. Úst. geol. 23 [Pal.] 1956.

Illaenus jevensis Holm p. 23, *I. schmidtii* Nieszk. p. 22, *I. intermedius* H. p. 24, Rõõmusoks (1).

Illaenus oriens Moberg & Segerberg referred tentatively to *Symphysurina*; *I.*? sp. recorded p. 264, Tjernvik.

Illaenus oviformis Warburg, *I.* cf. *linnarssoni* Holm, *I.* aff. *angustifrons* H., *I.* aff. *dalecarlicus* W., *I.* *salairicus* Web., *I.* *latus* McCoy, *I.* sp. pp. 65, 70, V. N. WEBER in Yavorsky.

Illaenus roemeri Volb., *I.* *angustifrons* Holm p. 373, *I.* *mascei* H. p. 379, Jaanusson (6).

Illaenus sp. listed p. 188 pl. viii fig. 3, Ivanova et al.

Illaenus sp. p. 159, Neuman.

Illaenus? sp. p. 58 pl. xxvi fig. 7, Ivanov & Myagkova.

Inouyina Poletayeva 1936 suggested reference to Antatlasidae p. 449, Lochman (1).

Inoyellaspis expectans Ivsh. [not seen] p. 7, Ivshin.

Inoyuina [sic] *mana* Repina MS [nom. nud.] p. 270, Repina.

Iranaspidinae subfam. n. [Leiostegiidae] for *Iranaspis* and *Plethopeltella* p. 448, Lochman J. Paleont. 30 3 1956.

Iranaspis King 1937 referred to Leiostegiidae (Iranaspidinae) subfam. n. p. 448, Lochman (1).

Irvingella aff. *I. flohri* Resser p. 556 pl. lxxi figs. 10-12, *I. richmondensis* R. and *I. adamsensis* R. synonyms of *I. flohri*, DeLand & Shaw.

Irvingella gibba p. 41, *I.* aff. *I. flohri* p. 42, Shaw & DeLand.

Irvingella jorusconii Rusc. pl. iv fig. 6, *I. platycephala* R. pl. iv fig. 7, *I. obliquoensis* R. pl. iv figs. 8-9, Rusconi (2).

Irvingella major (Ulrich & Resser) p. 22, *I.* sp. p. 19, PALMER in Nolan et al.

Isidreana tellecheai Rusc. p. 6, Rusconi (1).

Isidreana tellecheai Rusc. pl. x fig. 7, Rusconi (2).

Isidrella bispinata Rusc. pl. ii fig. 1, Rusconi (2).

Isocolidae Angelin 1854 discussed p. 1194 and taken to include *Isocolus*, *Cyphoniscus*, *Holdenia*, and possibly *Pradesia*, Whittington (5).

Isocolus sjögreni Angelin 1854 lectotype selected and figured p. 1194 pl. cxxix figs. 1-11, text-figs. 1a-b (drawings), Whittington (5).

Isocolus cf. *sjögreni* Ang. p. 65, V. N. WEBER in Yavorsky.

Isoteloides whitfieldi Raymond discussed and lectotype chosen p. 55; *I.*? *genalticurvatus* Hintze type of *Stenorhachis* gen. n. p. 54, Hintze & Jaanusson.

Isotelus platyrhachis (Steinh.) p. 383 table II, Jaanusson (6).

Isotelus recorded p. 92, Kay.

Isotelus-group proposed for *Isotelus* and others p. 66, Jaanusson (5).

Isotelus spiculum Endo probably referable to *Asaphellus* or *Kayseraspis* and probably includes *A.*? *orientalis* E. *partim* [hypostome pl. 13 fig. 21] p. 18, Kobayashi (1).

Isotelus spurius Phleger, *I.*? sp. p. 2091, Langenheim et al.

Isotelus sp. p. 155, Neuman.

Isoxys n. sp. [undescri.] p. 126, Daily.

Ithyektyphus gen. n. [no family assigned, compared with *Cedarina*, *Trachycheilus* etc.] p. 144 for type *Marjumi*? *tetonensis* Miller 1936 restr. (non pl. 8 fig. 21), *I.*? *tipperaryensis* for *M.*? *t.* Miller, Shaw J. Paleont. 30 1 1956.

Jakutus cf. *quadriiceps* Lerm. p. 90, J. sp. p. 114, Suvorova (1).

Judaiella sp. p. 269, Repina.

Jujuyaspis keideli borealis [nom. nud., called *J.* n. sp. in text] Ordovician (Tremadoc) Norway listed text-fig. 4 p. 52, Henningsmoen (3).

Kainella recorded p. 22, Nolan et al.

Kainella? *finalis* (Walcott) p. 11, J. BRIDGE & G. A. COOPER in McAllister.

Kaolishania Sun 1924 discussed p. 13, *K. pustulosa* S. pl. ii figs. 4a-o (drawings), *K. sp.* pl. ii fig. 14, *Paramansuyella granulosa* Endo 1937 referred to *K.* and may be a synonym [not only a homonym] of *K. granulosa* Kobayashi 1933, **Kobayashi (1).**

Kaolishaniinae Kobayashi 1935 discussed and referred to Damesellidae p. 12, taken to include *Kaolishania*, *Mimana*, *Chosenia*, *Wutingia*, *Endocrania* gen. n., ? *Tasmanocephalus*, **Kobayashi (1).**

? *Kaskia chesterensis* Weller pp. 33, 35, J. M. WELLER in Gilluly et al.

Kassinus kassini Ivsh., *K. pensus* I. [not seen] p. 7, **Ivshin.**

Kayseraspis Harrington 1938 discussed and referred to *Megistaspis*-group p. 65, *Plesiomegalaspis* Thorall 1946 either a subgenus or a synonym p. 64, **Jaanusson (5).**

Kayseraspis Harrington 1938 may be a subgenus of *Asaphellus* [quod vide] p. 19, **Kobayashi (1).**

Kayseraspis sp. — suggested reference of *Asaphellus* [sp. undet.] and *Trigonocerca* [sp. undet.] of Wilson 1954 p. 1347, R. J. Ross in Wilson.

Kazelia Walcott & Resser 1924 referred to Pterocephaliidae p. 458, **Lochman (1).**

Keithiella solitariensis Rusco. text-fig. 39, **Rusconi (2).**

Kendallia Berg 1953 referred to Parabolinoidea fam. n. p. 454, **Lochman (1).**

Kettneraspis see *Acantholoma*.

Kettneraspis see *Leonaspis*.

Kildiniella Lermontova gen. nondescr. [see Z.R. 73 11 p. 9] probably a misspelling of *Koldiniella* L. gen. nondescr. [quod vide].

Kindbladlia sp. p. 22, **PALMER in Nolan et al.**

Kingstonia Walcott 1924 discussed p. 65, *K. antiqua* sp. n. p. 66 pl. vi fig. 10 Cambrian (Middle) U.S.S.R. (Siberia), *Cherynsheva* Middle Cambrian trilobites from Eastern Siberia Part I 1953.

Kingstonia recorded p. 65, **Casey & Gilbert-Tomlinson.**

Kingstonia rotunda Resser, *K. walcotti* R. p. 20, **LOCHMAN in Bridge.**

Kingstonia spicata Lochman, *K. sp.* p. 21, **Palmer (1).**

Kingstonia spicata Lochman p. 556 pl. lxiii fig. 17, *K. sp.* indet. p. 557 pl. lxiii fig. 16, **DeLand & Shaw.**

Kingstonia spicata p. 42, **Shaw & DeLand.**

Kirkella vigilans (Whittington) p. 27, **Nolan et al.**

Kloucekia [sic] *phillipsi* (Barrande) lectotype chosen p. 510, **Šnajdr.**

Kloučekia see *Kloučekia*.

Kloučekia [recte *Kloučekia*] Delo classified into *K. (Kloučekia)* and *K. (Sokhretia)* subgen. n. for type *Dalmanites solitaria* Barrande p. 394, *K. cf. solitaria* recorded, **HUPÉ in Choubert et al. C.R. Acad. Sci., Paris 242 3 1956.**

Kobayashia taurus (Walcott) discussed p. 53, **Hintze & Jaanusson.**

Kochiella Poulsen 1937 [sic]—*Hamptonella* Resser 1937 a synonym p. 1392, *K. fitchi* (Walcott) [type of *H.*] holotype refigured p. 1393 pl. viii figs. 26–28, **Lochman (2).**

Kochiella see *Pedinocephalus* gen. n.

Kolbinella prima Repina MS [nom. nud.] p. 270, **Repina.**

Koldiniella gen. nondescr. [?= *Kildiniella* quod vide], *K. latifrons*, *K. cambrensis* [nom. nuda] p. 62, E. V. LERMONTOVA in Yavorsky.

Koldinioidia sp. p. 282, **Kobayashi (2).**

Kolichapeltis [sic]—*Bronteus angusticaudatus* Etheridge & Mitchell probably belongs p. 150, **Kobayashi & Igó.**

Kolihapeltis see *Scutellum*.

Komaspidella recorded p. 1559, **Fisher (1).**

Koněprusia Prantl & Přibyl 1949 discussed p. 250, **Whittington (1).**

Kootenia listed p. 40, **Öpik (3).**

[*Kootenia boucheri* [nom. nud.] p. 787, omitted Z.R. 93 11 (for 1955) Shaw (2).]

Kootenia eurekensis Resser p. 12, PALMER in Nolan et al.

Kootenia fergusoni (Gregory) p. 155, Thomas & Singleton.

Kootenia jakutensis Lerm. p. 85, K. sp. p. 52 pl. 3 fig. 2 pars 6, Suvorova (1).

Kootenia modica (Whitehouse) p. 17, Öpik (2).

Kootenia troyensis Resser (types refigured) including in synonymy *Solenopleura nana* (non Ford) of Walcott 1886, 1887, 1891 & Resser 1937 p. 1391 pl. vii figs. 1-10, K. cf. *K. marcovi* (Whitfield) p. 1392 pl. vii figs. 13-18; *K. fordii* (Walcott) may be a synonym of *K. marcovi* p. 1390; cf. K. sp. undet. listed p. 1342, Lochman (2).

Kootenia sp. p. 7, Ivshin.

Kooteniella slatkovskii (Schm.) p. 270, Repina.

Kooteniella sp. p. 135, Repina et al.

Koptura cf. *lisani* (Walcott) p. 19, Öpik (2).

Koptura-like genus (2 spp.) recorded p. 287, A. A. Öpik in Benson.

Kormagnostus p. 42, Shaw & DeLand.

Kormagnostus seclusus (Walcott) p. 18, PALMER in Nolan et al.

Kormagnostus cf. *K. simplex* Resser, K. sp. p. 21, Palmer (1).

Kormagnostus sp. indet. p. 557 pl. lxiv figs. 12-13, DeLand & Shaw.

Kuanyangia Hupé 1952 [recte 1953] a synonym of *Redlichia* p. 282, Schindewolf (2).

Kujandaspis gen. n. [Familia incerta, compared with *Aphelaspis*], p. 45 for type *K. kujandensis* sp. n. p. 46 pl. iii figs. 14-21, 25, *K. ex gr. k.* pl. iii figs. 22-23, *K. aff. k.* pl. iii fig. 28, pl. iv figs. 14-15, *K. rarus* sp. n. p. 43 pl. viii figs. 12, ? 24 Cambrian (Upper) U.S.S.R. (Kazakhstan), Ivshin Upper Cambrian trilobites of Kazakhstan Part I 1956.

Kujandina gen. n. [Familia incerta, compared with *Aphelaspis*, *Olientella*, *Kujandaspis*] p. 50 for type *K. taskudukensis* sp. n. p. 51 pl. viii figs. 13-16, *K. ? brevis* sp. n. p. 53 pl. iv fig. 18a Cambrian (Upper) U.S.S.R. (Kazakhstan), Ivshin Upper Cambrian trilobites of Kazakhstan Part I 1956.

Labiostria Palmer 1954 [recte 1955] referred to *Pterocephaliidae* p. 458, Lochman (1).

Labiostria platifrons Palmer — tentative reference of "*Pterocephalina*" cf. *P. grata* record of Wilson 1954 p. 1346, Wilson.

Labradoria cambridgensis sp. n. Cambrian (Lower) U.S.A. (N.Y.) p. 1394 pl. v fig. 12, Lochman Bull. geol. Soc. Amer. 67 10 1956.

Lancastria Kobayashi — *Paradozoides peregrinus* Whitehouse and *Oryctocephalus discus* W. may together represent a sp. of *L.* p. 17, Öpik (2).

Lannacus subgen. n. of *Megalaspides* [quod vide].

Lapidaria gen. n. [Asaphidae] p. 220 for type *L. tenella* sp. n. p. 221 pl. iv figs. 3-7 text-fig. 35A, *L. rugosa* sp. n. p. 222 pl. iv figs. 8-9 Ordovician (Lower) Sweden, Tjernvik Bull. geol. Instn Univ. Upsala 36 2-3 1956.

Latenaspis egregius Repina MS [nom. nud.] p. 270, Repina.

Latiredlichia Hupé 1952 [recte 1953] a synonym of *Redlichia* p. 282, *L. saitoi* H. identical or close to *R. noettingi* p. 298, Schindewolf (2).

Latiredlichidae Hupé a synonym of *Redlichidae* p. 289, Schindewolf (2).

Laudonia gen. n. [Wanneriinae] for type *L. bispinata* sp. n. Cambrian (Lower) Canada (B.C.) p. 60 pl. xv figs. 4-5 text-fig. 1F, *L. prima* (Lochman) for *Wanneria mexicana* p. L. p. 61, Harrington J. Paleont. 30 1 1956.

Leiagnostus espigonensis sp. n. p. 11 fig. 7 Ordovician (Lower)

Argentina (Mendoza), **Rusconi** Rev. Mus. Hist. nat. Mendoza 9 1-2 1956.

Leiagnostus espigonensis Ruso. pl. xii fig. 7, **Rusconi** (2).

Leiagnostus peltatus sp. n. for *Agnostus* sp. Wiman 1905 (refigured) p. 197 pl. i figs. 20-21 Ordovician (Lower) Sweden, **Tjernvik** Bull. geol. Instn Univ. Upsala 36 2-3 1956.

Leiocoryphe p. 42, **Shaw & DeLand**.

Leiocoryphe platycephala Kobayashi, *L.* ? sp. p. 22, **PALMER** in **Nolan** et al.

Leiocoryphe sp. indet. p. 557 pl. lxiv figs. 1-3, **DeLand & Shaw**.

Leiopyge laevigata (Dalman), *L. l. rugifera* Westergaard, *L. l. cf. armata* (Linnarsson) from Queensland p. 16, **Öpik** (2).

Leiopyge laevigata, *L. l. armata* p. 185, **Öpik** in **Banks**.

Leiostegidae see Iranaspidinae subfam. n.

Leiostegium sp. p. 27, **COOPER** in **Nolan** et al.

Lejopyge empozadense Ruso. pl. iv fig. 10, **Rusconi** (2).

Leonaspis R. & E. Richter referred to Odontopleurinae and discussed p. 205, *L.* n. sp. [= *L. williamsi* Whittington] text-figs. 7A-C, **Whittington** (1).

Leonaspis R. & E. Richter 1917 discussed and preferred to *Acanthaloma* Conrad 1840 p. 505, distinction of Prantl & Přibyl's 1949 subgenera *L. (Acanthalomina)* and *L. (Kettneraspis)* considered uncertain, *L. (K.) pigra* holotype not found at Harvard, *L. coronata* (Salter) pl. lix fig. 12 and *L. deflexa* (Lake) so referred p. 506, *L. tuberculatus* (Hall 1859) [so ascribed, but to Conrad on pl. expl.] redescribed and syntypes refigured p. 507 pl. lvii figs. 1-9, *L. williamsi* sp. n. Devonian (Lower) U.S.A. (Oklahoma) p. 509 pl. lvii figs. 10-16, pl. lviii figs. 1-4, 6-7, **Whittington** J. Paleont. 30 3 1956.

Leonaspis R. & E. Richter 1917—proposed protection by suppressing *Acanthaloma* Conrad 1840, and proposed addition to Official List of Generic Names, **Whittington** (8).

Leonaspis (Kettneraspis) elliptica, ? *L. (K.) aries* p. 372, R. & E., **Richter** (2).

Leptoplastus sp. listed p. 169, **Tjernvik**.

Lermontovia gen. n. [Protolenidae (Lermontoviinae)] p. 37 for type *Protolenus dzevanovskii* Lermontova 1951 p. 38 pl. i figs. 1-9, pl. ii figs. 1-2, text-figs. 13 (reconstruction)—14 (6 growth-stages), *L. grandis* (L.) for *P. g. L.* 1951 p. 45 pl. iii figs. 1-4 text-figs. 15a-6, *L. lenaica* sp. n. p. 49 pl. iii figs. 5-6 text-fig. 16, *L. convexa* sp. n. p. 51 pl. ii figs. 3-4 text-fig. 17, *L. clavata* (L.) for *Bergeroniellus* ? *clavatus* L. 1951 p. 52 text-fig. 18 Cambrian (Lower) U.S.S.R. (Yakutsk), **Suvorova** Trav. Inst. paléont. Acad. Sci. U.R.S.S. 63 1956.

Lermontovia **Suvorova** 1956 discussed, *L. lenaica* S. p. 1103 pl. fig. 3B, *L. dzevanovskii* (Lermontova) pl. fig. 3A text-fig. 2 (reconstruction), *L. grandis* (L.) pl. fig. 36, *L. convexa* S. p. 1104, pl. fig. 3r, *L. turkestanica* sp. n. Cambrian (Lower) U.S.S.R. (Turkestan) p. 1104 pl. fig. 3d, **Suvorova** C.R. Acad. Sci. U.R.S.S. NS 111 5 1956.

Lermontoviinae subfam. n. [Protolenidae] p. 37 for *Lermontovia* gen. n. and *Rinconia* Hupé, **Suvorova** Trav. Inst. paléont. Acad. Sci. U.R.S.S. 63 1956.

Lermontoviinae **Suvorova** discussed p. 1103, **Suvorova** (2).

Levinia brachypyge Ruso. text-fig. 12, *L. isidrensis* R. text-fig. 15, *L. manantialensis* R. text-fig. 25, *L. hornensis* R. text-fig. 42, *L. simplex* R. pl. i fig. 9, **Rusconi** (2).

Levinia simplex Ruso. p. 119, **Rusconi** (3).

Lichas see N. gen. and sp.

Lichas cf. *scabra* p. 21, **Fromaget**.

Lichas (Euarges) sibiricus sp. n. p. 39 pl. iii figs. 10-11, text-fig. 7 Devonian (Middle), *L. (E.) parvulus* Novak var. *convexa* var. n. p. 41 pl. ii figs. 16a-6 Devonian (Lower), *L. (E.) altirhachis* sp. n. p. 42 pl. ii

fig. 15 Silurian (Upper) [?], *L. (E.)* sp. No. 1 p. 43 text-fig. 8 Silurian (Upper) U.S.S.R. (Kuznetsk), Chernysheva Upper Silurian and Devonian trilobites from the Kuznetsk Basin 1951.

Lichas sp. p. 58 pl. xxvi figs. 3a, 6, *L. ?* pl. xxvi fig. 4, Ivanov & Myagkova.

Lichas sp. listed p. 188 pl. iv fig. 6 pars, Ivanova et al.

Lichengia Kobayashi 1942 referred to Saukiidae p. 451, Lochman (1).

Lichid protaspis for the protaspis assigned to *Arges consanguineus* by Beecher 1895 redescribed and figured p. 1201 pl. cxxx figs. 1-6 text-figs. 1a-b, Whittington (6).

Linguagnostus see *Diplagnostus*.

Linguagnostus kjerulfi (Brögg.) p. 88, *L. k.* var. *danica* Lerm. p. 86, Chernysheva (2).

Liostracus Angelin 1854 discussed, type taken to be *L. aculeatus* A., *L. allachjunensis* Lermontova MS sp. n. p. 32 pl. iv figs. 12-14 Cambrian (Middle) U.S.S.R. (Siberia), *L. sp.*, *L. cf. atlassowi* L., *L. ?* sp. p. 86, Chernysheva Middle Cambrian trilobites from Eastern Siberia Part I 1953.

Liostracus see *Ptychoparia*.

Liostracus recorded p. 135, Repina et al.

Liostracus sp. p. 270, Repina.

Lisania recorded p. 19, Öpik (2).

Lotagnostus recorded p. 65, Casey & Gilbert-Tomlinson.

Lotagnostus recorded p. 22, Öpik (2).

Lotagnostus pygidium pl. cxlvi fig. 12, Wilson.

Lotcephalus Resser 1937 referred to Pteroccephaliidae p. 458, Lochman (1).

Lotcephalus Resser 1937—*Pteroccephalina* R. 1938 a synonym, *L. bilobatus* (Hall & Whitfield) for *Dikellocephalus b.* [type of *P.*] holotype refigured with synonym (based on association of cranidia and pygidia) *Dicellocephalus richmondensis* Walcott [type of *L.*] holotype

refigured p. 608 pl. lxxiii figs. 1-6, 8, *L. sp.* p. 610 pl. lxxiii fig. 7, Palmer (2).

Lotcephalus richmondensis (Walcott) pp. 19, 22, PALMER in Nolan et al.

Llanoaspis blandensis, buttsi, campbelli, clinchensis, peculiaris, ulrichi, virginica [with synonym *rogersvillensis*], *walcotti* (Resser spp.) p. 20, LOCHMAN in Bridge.

Llanoaspis undulata Lochman p. 21, Palmer (1).

Lloydolithus (Protolloydolithus) see *Protolloydolithus*.

Lobocephalina may be a congeneric geographic variant of *Conocephalina* p. 453, Lochman (1).

Loganellus recorded p. 71, Casey & Gilbert-Tomlinson.

Loganellus paramillanus Ruso. pl. ii fig. 3, *L. simplicicostatus* [sic] R. pl. ii fig. 11, *L. ornatus* R. pl. ii fig. 12, *L. pichanus* R. pl. v fig. 10, *L. incisus* R. pl. vii fig. 9, Rusconi (2).

Loganopeltis depressaformis sp. nov. [nom. nud.] p. 8, Ivshin.

Lonchocephalus recorded p. 1559, Fisher (1).

Lonchodomas portlocki (Barr.) p. 258 pl. iii fig. 7, Kielan.

Lonchodomas sp. p. 2091, Langenheim et al.

Lonchodomas sp. p. 272, Tjernvik.

Lopnorites Troedsson 1937 a synonym of *Proceratopyge* p. 21, Ivshin.

Lopnorites see *Proceratopyge*.

Lorenzella recorded p. 172, Öpik in Banks.

Lorenzella sp. p. 167, Öpik in Elliston.

Lotagnostus obscurus Palmer p. 22, PALMER in Nolan et al.

Lotagnostus trisectus (Salter) var. *memorabilis* var. nov. [nom. nud.] p. 8, Ivshin.

Lusatiops R. & E. Richter 1941—*Protolenus radegasti* Czarnocki probably belongs p. 139, Samsonowicz.

Lusatiops (genus compared with) p. 126, *L. n. sp.* [undescribed] p. 126, Daily.

Lychas see N. gen. and sp.

Lyriaspis Whitehouse—*Clappaspis* [Deiss] a synonym p. 43, *L. alroyensis* (Eth.) p. 40; *Ptychoparia anderseni* Henningsmoen may be a *L. p.* 44, Öpik (3).

Lyriaspis several spp. p. 17, Öpik (2).

Maladia Walcott 1925 referred to *Eurekiidae* p. 450, Lochman (1).

Maladia ? sp. p. 21, Palmer (1).

Maladioidella Endo 1937 referred to *Pterocephaliidae* p. 458, Lochman (1).

? *Maladioides* (or ? *Changshania*) sp. p. 276 (283) pl. i fig. 9, Lu (1).

Mapania angusta (Whitehouse) p. 19, Öpik (2).

Mareda Kobayashi 1942—*Prosaikia* ? *anomala* Ulrich & Resser and probably *Hamashania pulchra* K. referred p. 448, Lochman (1).

Marjunia ? *tetonensis* Miller 1936 restr. type of *Ithyektyphus* gen. n. p. 144, *M. ? tetonensis M. partim* (pygidium pl. 8 fig. 21) referred to *Olenoides incertus* nom. n. p. 145, *M. ? tipperaryensis* M. referred tentatively to *I.*, Shaw (3).

Marrolithoides Williams 1948 considered a full genus pp. 49, 63, *M. simplex* (W.) holotype refigured pl. ix fig. 3, *M. arcuatus* sp. n. p. 64 pl. viii figs. 16–17, pl. ix figs. 1–2 Ordovician (Middle) Britain (Shropshire); *M. anomalis* W. referred to *Marrolithus* p. 59, Whittard Palaeontogr. Soc. [Monogr.] 110 1956.

Marrolithus Bancroft 1929 discussed p. 48, *M. craticulatus* sp. n. p. 51 pl. vi figs. 12–16, *M. primus* Williams 1948 (holotype refigured) discussed and considered that *M. inflatus* var. *incipiens* W. may be synonymous p. 53 pl. vii fig. 1, *M. bureausi* (Oehlert 1895) may be composite sp. [allied in part to *M. craticulatus*, in part to *Marrolithoides simplex* (W.)] p. 54, *M. inflatus* W. holotype re-

examined and refigured p. 55 pl. vii fig. 5, *M. inflatus* var. *maturus* W. holotype refigured p. 55 pl. vii figs. 2–4, *M. favus* (Salter) syntypes refigured p. 55 pl. vii figs. 6–13 text-fig. 4 (diagram of fringe pits), *M. favus* var. *moderatus* W. holotype refigured p. 57 pl. vii fig. 14, *M. inornatus* sp. n. p. 58 pl. viii figs. 1–3, *M. cf. i.* pl. viii fig. 4, *M. anomalis* (W.) for *M. (Marrolithoides) a.* W. holotype refigured pl. vii fig. 16, *M. cf. anomalis* p. 59 pl. vii fig. 15, *M. arenarius* sp. n. including *M. sp.* Whittington 1941 p. 60 pl. viii figs. 5–8, *M. cf. a.* [pygidium attributed] pl. viii fig. 9, *M. bilinearis* sp. n. p. 61 pl. viii figs. 10–13, *M. ventriculatus* sp. n. p. 62 pl. vii figs. 17–18, *M. scalpriformis* sp. n. p. 62 pl. viii figs. 14–15 Ordovician (Middle) Britain (Shropshire); *M. ultimus* Bancroft 1949 type of *Costonia* gen. n. p. 50; *M. (Marrolithoides)* W. and *M. (Telaeomarrolithus)* W. considered separate genera [quae vide] p. 49, Whittard Palaeontogr. Soc. [Monogr.] 110 1956.

Marrolithus recorded p. 393, Huré in Choubert et al.

Maryvillia Walcott 1916 referred to *Asaphiscinae*, discussed with synonyms *Protillaenus* Raymond 1937 and *Blountina* Lochman 1944; *M. arion* W. 1916 discussed with following as synonyms—*M. ariston* W. 1916 *partim* [pygidium pl. 64 fig. 5a], *Blountia angustata*, *B. arguta*, *B. widnerensis* Resser 1942 spp., *Blountina triangularis* Lochman, *B. westoni* Rasetti 1946, *Protillaenus marginatus* Raymond 1937; *Blountina eleanora* L. 1944 [type of *B.*] referred to *M.*; *M. ariston* W. restr. type of *Coosina* gen. n. p. 1267 with several spp. of *M.* as synonyms [see under *Coosina*], *M. loperi* R. 1942 referred to *C.*, *M. bristolensis* and probably *M. violaensis* R. considered typical of *Blountia* p. 1268, Rasetti (1).

Maryvillia recorded p. 53, Öpik (3).

Maryvillia arion (Walcott), *M. keithi* Resser, *M. sp.* for *Coosia athletes* of Resser 1938 p. 20, Lochman in Bridge.

Maryvillia cf. *M. ariston* Walcott p. 21, Palmer (1).

Maustonina Berg 1953 referred to *Parabolinoididae* fam. n. p. 454, Lochman (1).

Maustonina see *Olentella* gen. n.

Meeria Frederickson 1949 referred to *Parabolinoididae* fam. n. p. 454, Lochman (1).

Megalaspidella Kobayashi 1937 referred to *Megistaspis*-group p. 65, Jaanusson (5).

Megalaspides Brögger 1886 discussed p. 246, *M. (M.) dalecarlicus* (Holm) lectotype chosen and figured p. 247 pl. viii figs. 7-13 text-figs. 39C, 40A, *M. (M.)* sp. aff. d. p. 249, *M. (M.) paliformis* sp. n. p. 249 pl. viii figs. 14-15, *M. (M.)* sp. p. 278; *M. (Lannacus)* subgen. n. for type *M. nericiensis* Wiman 1905 lectotype chosen and figured p. 251 pl. ix figs. 1-5 text-fig. 40B, Ordovician (Lower) Sweden, Tjernvik Bull. geol. Instn Univ. Upsala 36 2-3 1956.

Megalaspides may be referred to either *Megistaspis*-group or *Isotelus*-group p. 66, Jaanusson (5).

Megalaspis Angelin 1851 (June) non Bleeker 1851 (May) renamed *Megistaspis* nom. n. [quod vide] p. 60; *M. grandis* var. *lata* Törnquist 1884 considered nom. nud. and a homonym of *M. limbata* var. *lata* T. 1884, *M. multiradiata* A. 1851 (probably a synonym of *Megistaspis gigas* A. 1851) and *M. latilimbata* A. 1851 considered nomina dubia p. 72, Jaanusson (5).

Megalaspis (Paramegalaspis) see *Paramegalaspis*.

Megalaspis (Plesiomegalaspis) see *Plesiomegalaspis*.

Megalaspis lasherensis Rusc. pl. ix fig. 12, Rusconi (2).

Megalaspis planilimbata Angelin and *M. heroides* Brögger referred to *Plesiomegalaspis*, *M. stenorhachis* A. type of *Promegalaspides (Borogothus)* subgen. n. to which is referred *M. intacta* Moberg & Segerberg, Tjernvik.

Megistaspidella subgen. n. see *Megistaspis*.

Megistaspis gen. n. (nom. n. for *Megalaspis* Angelin 1851 [June] non Bleeker 1851 [May]) p. 60 for type *Trilobites limbatus* Boeck 1838 of which lectotype refigured and all later records excluded [these being probably referable to *M. l. elongata* Schmidt 1906] p. 70 pl. i figs. 1-3, *M. (Megistaspis)* subgen. n. p. 68 taken to include following spp.—*limbata* Boeck 1838, *hyorrhinus* Leuchtenberg 1843, *limbata* var. *minor*, *polyphemus* Brögger 1882, l. var. *lata* Törnquist 1884 (with synonym *polyphemus* var. *törnquisti* Schmidt 1906), *kolenkoi*, *mickwitzii*, ? *gibba* S. 1898, *limbata* var. *elongata*, *larvae*, *hyorrhina* var. *stacyi* S. 1906, *lepikuensis* nom. n. p. 69 for *polyphemus* var. *minor* S. 1906 (non *limbata* var. *minor* B. 1882), *laine* nom. n. p. 70 for p. var. *knyrkoi* S. 1906 (non *Megalaspis knyrkoi* S. 1906), *ingeriensis* nom. n. p. 70 for p. var. *lamanskii* S. 1906 (non *M. acuticauda* var. *lamanskii* S. 1906), *M. (M.)* of. *elongata* (S.) text-fig. 1, *M. (M.)* n. sp. [undescrib.] for Brögger 1882 pl. 9 figs. 3-4 p. 70; *M. (Megistaspidella)* subgen. n. p. 71 for type *Entomostracites extenuatus* Wahlenberg 1821 lectotype selected & refigured pl. i figs. 4-6 text-figs. 2A-B, following spp. also referred to subgen.—? *heros* Dalman 1828, *grandis* Sars 1835, *longicauda*, *centron* L. 1843, *gigas* Angelin 1851 (with probable synonym *multiradiata* A. 1851 nom. dub.), *explanata*, ? *rotundata* A. 1851, *acuticauda*, *rudis* A. 1854, *lambens* Törnquist 1884, ? *lawrowi* Schmidt 1898, *acuticauda* var. *obtusa*, a. var. *triangularis*, a. var. *lamanskii* S. 1906, *obtusicauda* Bohlin 1955 p. 72; *planilimbata*-group of *Megistaspis* recognised p. 67 for *M. planilimbata* A. 1851, Jaanusson Bull. geol. Instn Univ. Upsala 36 1 1956.

Megistaspis-group proposed for *Megistaspis*, *Asaphellus*, *Thysanopyge*, *Megalaspidella*, *Kayseraspis* & *Paramegalaspis* p. 65, Jaanusson (5).

Megistaspis aff. *limbata* p. 129 ff., *M. l. lata* (Törnquist) p. 133 ff., *M.* sp. p. 173, Tjernvik.

Meisterella meister Ivsh. [not seen] p. 7, Ivshin.

Mendodiscus tuberculatus Rusc. text-figs. 4a-b, Rusconi (2).

Mendoparabolina brevicauda Ruso. pl. ii figs. 14, 15 [attributed hypostome], Rusconi (2).

Meneviella Stubblefield 1951 discussed p. 14, *M. venulosa* (Salter) p. 15 pl. i fig. 5, Chernysheva (2).

Menomonion sp. p. 21, Palmer (1).

Menoparia ? *nericiensis* sp. n. possibly including *Apatocephalus serratus* var. *dubius* of Schmidt 1907 p. 206 pl. ii figs. 9-11 text-fig. 32B Ordovician (Lower) Sweden, Tjernvik Bull. geol. Instn Univ. Upsala 36 2-3 1956.

Mesodema Whitehouse 1939 a synonym of *Redlichia* p. 282, *M. venulosa* W. identical or close to *R. noeltingi* p. 298, Schindewolf (2).

Mesonacis bristolensis Resser type of *Bristolia* gen. n. to which is also referred *M. insolens* R. p. 59, Harrington.

Mesonacis fremonti (Walcott), *M.* sp. cf. *bristolensis* (Resser), *M.* sp. p. 646, Hazzard & Mason.

Mesotaphrasinae [corrected to Mesotaphraspidinae p. 77] subfam. n. [Dimeropygididae] p. 47 for *Mesotaphrasis* [recte *Mesotaphraspis*], *Chomatopyge*, and possibly *Clelandia* & *Panarchaeogonus*, Jaanusson Bull. geol. Instn Univ. Upsala 36 1 1956.

Mesotaphrasis [sic] Whittington and Evitt 1954 referred to Dimeropygididae (Mesotaphrasinae) [sic] subfam. n. p. 47, Jaanusson (4).

Mesotaphraspidinae see Mesotaphrasinae.

Mesotaphraspis see *Mesotaphrasis*.

Meteoraspis cf. *M. borealis* Lochman p. 21, Palmer (1).

Meteoraspis boulderensis sp. n. [DeLand] p. 557 pl. lxiii fig. 18, pl. lxiv figs. 4-6, *M. elongata* Lochman p. 558 pl. lxiv fig. 9, *M.* sp. indet. p. 558 pl. lxiv fig. 8 Cambrian (Upper) U.S.A. (Wyoming), DeLand & Shaw J. Paleont. 30 3 1956.

Meteoraspis elongata p. 42, Shaw & DeLand.

Microdiscus schucherti Matthew taken as type of *Eodiscus* M. p. 5, *M. eucentrus* Linnarsson a synonym of *E. punctatus* (Salter) p. 6, Chernysheva (2).

Mimana Kobayashi 1935 discussed and referred to Kaolishaniinae p. 14, Kobayashi (1).

Miraspininae R. & E. Richter with synonym Ceratocephalidae of Prantl & Přibyl discussed p. 235, taken to include *Miraspis*, *Ceratocephala*, *Proceratocephala*, *Whittingtonia*, *Dicranurus*, and tentatively *Selenopeltoides*, *Orphanaspis*, *Koněprusia* & *Ceratonurus*; see also Odontopleurid protaspis, Whittington (1).

Miraspis R. & E. Richter 1917 discussed p. 236, *M. mira* (Barrande) text-figs. 15A-D, ? *M.* sp. ind. p. 238 pl. xiv figs. 1, 7, Whittington (1).

Miraspis R. & E. Richter 1917 discussed p. 514, *M. mira* (Barrande) text-figs. 3A-D, *M.* sp. indet. p. 515 pl. lx figs. 1, 4, *M.* ? sp. for *Acidaspis terribilis* Reed 1914 *partim* (pl. 6 fig. 9) p. 515 pl. lx figs. 7-8, Whittington (3).

Modocia Walcott 1924—implied synonymy of *Semnocephalus* Resser 1942, *M. centralis* (Whitfield) 1877 with synonym *Solenopleura* ? *weedi* Walcott 1899 [considered inseparable on basis of cranidial measurements text-figs. 1-4] p. 141, *M. oweni* (Meek & Hayden) a separate sp. on basis of measurements on holotype specimen to which sp. is restricted [other records referred to *M. centralis*], Shaw (3).

Modocia Resser 1935 [recte Walcott 1924] probably a junior synonym of *Armonia* Walcott 1924 p. 1343, C. LOCHMAN in Wilson.

Modocia centralis (Whitfield) p. 558 pl. lxiv fig. 10, *M.* sp. indet. p. 559 pl. lxiv fig. 11, DeLand & Shaw.

Modocia centralis p. 42, Shaw & DeLand.

Modocia manqueliana Ruse. pl. vi fig. 12, Rusconi (2).

Modocia nevadensis Palmer pp. 16, 18, PALMER in Nolan et al.

Monadina Barrande 1846 a contemporaneous subjective synonym of *Sao* B. 1846 which is formally given precedence p. 132, *M. distincta* B. 1846 a synonym of *S. hirsuta* B. 1846 p. 131, Poulsen (2).

Monocheilus? p. 42, Shaw & DeLand.

Monocheilus? sp. indet. p. 559 pl. lxvii fig. 2 pars, DeLand & Shaw.

Monocheilus (form with affinities to) p. 185, Öpik in Banks.

Monorakos ossacrum Kramarenko, *M. magnus* K. pl. iii fig. 7, *M. tunguskaensis* K., *M. mutabilis* K., *M. sp.* listed p. 188, Ivanova et al.

Moustonia see *Olentella* gen. n.

Moxomia see *Parabolinella*.

Nankinolithus gen. nov. [nom. nud.] p. 6 (21) Ordovician (Upper) China, P'an.

Nasocephalus Wilson 1954—relations with *Agraulos* spp. from Scandinavia discussed p. 1342, Wilson.

Neochilonorria multicostata Rusc. pl. i fig. 4, *N. coronillensis* R. pl. iv figs. 3–4, *N. excavata* R. pl. iv fig. 5, Rusconi (2).

Neochilonorria sp. p. 119, Rusconi (3).

Neometacanthus see *Asteropyge*.

Neoredlichia Saito 1936 a synonym of *Redlichia* p. 282, Schindewolf (2).

Nepea narinosa Whitehouse p. 19, *N. aff. n.* p. 20, Öpik (2).

Nepea narinosa Whitehouse p. 156, Thomas & Singleton.

Nepeid recorded p. 286, O. P. SINGLETON in Benson.

Nepeidae undescribed genus p. 63, Casey & Gilbert-Tomlinson.

Nephranops see *Phacops*.

Nericiaspis robusta (Tjernvik) listed p. 134, Tjernvik.

Nieszkowskia variolaris (Linnarsson) — record of Schmidt 1881 pl. 9 fig. 2 tentatively excluded p. 419n, Temple (1).

Nileus armadillo (Dalman) p. 208 text-fig. 33D, *N. limbatus* Brögger including *N. a.* of Moberg and Segerberg 1906 (refigured) p. 208 pl. ii figs. 12–15 text-fig. 33A, *N. exarmatus* sp. n. p. 209 pl. ii figs. 16–21 text-fig. 33B, *N. orbiculatus* sp. n. p. 210 pl. ii figs. 22–23 text-fig. 33C, *N. ?* sp. p. 211 Ordovician (Lower) Sweden, Tjernvik Bull. geol. Instn Univ. Upsala 36 2–3 1956.

Ninaspis gen. n. [Familia incerta, compared with *Genevieveella*] p. 54 for type *N. tchernyshevae* sp. n. p. 55 pl. i figs. 6, 6a Cambrian (Upper) U.S.S.R. (Kazakhstan), Ivshin Upper Cambrian trilobites of Kazakhstan Part I 1956.

Niobe Angelin 1851 discussed p. 223, *N. insignis* Linnarsson type probably lost p. 224 pl. iv fig. 10 text-fig. 36A, *N. incerta* sp. n. p. 225 pl. iv figs. 11–13 text-fig. 36B, *N. emarginula* A. lectotype selected and figured p. 226 pl. iv figs. 14–17 text-fig. 36C Ordovician (Lower) Sweden; following spp. referred to *Niobella* [quod vide]—*obsoleta* Linnarsson, *laeviceps* Dalman [see also *Platypeltoides*], *imparilimbata* Bohlin, Tjernvik Bull. geol. Instn Univ. Upsala 36 2–3 1956.

Niobe asiatica sp. nov., *N. saryarkensis* sp. nov. [nomina nuda] p. 8, Ivshin.

Niobe canteriana sp. n. p. 8 fig. 12 [referred hypostome] Ordovician (Lower) Argentina (Mendoza), Rusconi Rev. Mus. Hist. nat. Mendoza 9 1–2 1956.

Niobe canteriana Rusc. pl. xii fig. 12, Rusconi (2).

Niobe homfrayi var. *smithi* (Stubblefield) 1933 types listed p. 147, Curtis.

Niobella Reed 1931 discussed p. 228, *N. obsoleta* (Linnarsson) for *Niobe o. l.* lectotype selected and figured p. 229 pl. v figs. 1 (cranidium attributed)—2 text-fig. 37A, *N. sp. aff. obsoleta* no. 1 for *N. o.* of v. Post 1906 p. 230, *N. sp. aff. o.* no. 2 p. 231 pl. v fig. 3, *N. bohlini* sp. n. [for *Niobe laeviceps* of Wiman 1905, Moberg & Segerberg 1906 *partim*

(pl. 6 fig. 19), *N.* spp. nos. 1 and 2 W. 1905, and *N.* sp. aff. *o.* of Tjernvik 1952] p. 231 pl. v figs. 4-9 text-fig. 37B, *N. imparilimbata* (Bohlin) for *Niobe i.* B. p. 232 pl. v fig. 10, *N.* sp. aff. *i.* [for *Niobe laeviceps* of Skjeseth 1952 and *N.* sp. aff. *l.* of T. 1952] p. 233 pl. v figs. 11-14 text-fig. 37C, *N. laeviceps* (Dalman) p. 233 pl. v figs. 15-16 Ordovician (Lower) Sweden, Tjernvik Bull. geol. Instn Univ. Upsala 36 2-3 1956.

Niobina sp. p. 234 pl. v fig. 17, Tjernvik.

Nixonella sp., *N.?* cf. *N.?* *wolfensis* Lochman p. 21, Palmer (1).

Notocoryphe andinus Ruso. text-fig. 40, Rusconi (2).

Novakaspis see *Otarion*.

Novaspis sp. (sp. nov.) [undescrib.] p. 258, Kielan.

Obrucheviaspis Ivshin 1953 [not seen] discussed and compared with *Dellea* p. 70, *O. inornatus* I. holotype figured p. 71 pl. ix fig. 5 Cambrian (Upper) U.S.S.R. (Kazakhstan), Ivshin.

Octobronteus Weber 1945 — *Stoermerspispis* Prantl & Přibyl 1947 a subjective synonym p. 473, R. & E. Richter (3).

Odontocephalus selenurus, *O.* sp. p. 1457 ff., *O. bifidus* p. 1463, Oliver.

Odontochile Hawle & Corda 1847—proposed placing on Official List of Generic Names and designation of *Asaphus hausmanni* Brongniart 1822 as type [setting aside Vogdes' 1925 selection of *O. applanatus* H. & C. which is probably a subjective synonym of *A. h.*], Tripp & Whittard.

Odontopleura Emmrich 1839 discussed p. 196, *O. ovata* E. reconstruction text-fig. 4, Whittington (1).

Odontopleura? sp. Strnad 1955 p. 73 (80), Strnad (1).

Odontopleurid protaspis [? *Miraspinae*] p. 250 pl. xxi figs. 23-24, Whittington (1).

Odontopleurid trilobite recorded p. 264, Tjernvik.

Odontopleuridae Burmeister 1843 discussed and considered only of family status p. 193, classified into *Odontopleurinae*, *Apianurinae* subfam. n., *Miraspinae*, *Selenopeltinae* [quae vide]; *Ancyropyge* Clarke 1892 may belong to family p. 282, *Globulaspis* Reed 1931 may not p. 283, Whittington (1).

Odontopleuridae — possible relations with *Cheiruracea* and *Phacopacea* p. 428, C. J. STUBBLEFIELD in Temple (1).

Odontopleurinae Burmeister 1843 discussed with synonym *Acanthalominae* Prantl & Přibyl 1949 p. 195, Whittington (1).

? *Ogygiocaris brechensis* sp. n. p. 4 fig. 1 Ordovician (Lower) Argentina (Mendoza), Rusconi Rev. Mus. Hist. nat. Mendoza 9 1-2 1956.

Ogygiocaris brechensis Ruso. pl. xii fig. 1, Rusconi (2).

Ogygites annamensis p. 27, Fromaget.

Ogygopsis p. 42, Shaw & DeLand.

Oidalgagnostus recorded p. 174, ÖPİK in Banks.

Oidalgagnostus n. sp. [undescrib.] p. 286, O. P. SINGLETON in Benson.

Olekmaspis gen. n. [Protoleninae] p. 126 for type *O. bobrovi* sp. n. p. 127 pl. xii figs. 1-7 text-fig. 45 Cambrian (Lower) U.S.S.R. (Yakutsk), Suvorova Trav. Inst. paléont. Acad. Sci. U.R.S.S. 63 1956.

Olenaspella gen. n. [no family specifically assigned, presumably *Olenidae*] p. 1344 for type *Parabolinella* [?] *evansi* Kobayashi 1936 lectotype selected & figured (K. 1938 pl. 16 fig. 11) pl. cxlvi figs. 20-21 ? Cambrian (Upper) Canada (B.C.), *O. occidentalis* (Wilson) for *P. o. W.* 1951 p. 1344, relations of *Olenaspella* to *Eugonocare* Whitehouse 1939 p. 1345, Wilson J. Paleont. 30 6 1956.

Olenaspella Wilson 1956 [called Wilson's new genus] referred to *Parabolinoididae* fam. n. and may be ancestral to *Olenidae* p. 455, Lochman (1).

Olenellinae see *Fremontella* and *Bristolia* genn. n.

Olenellus argenteus Walcott lectotype selected, *O. argenteus* W. *partim* (1910 pl. 40 fig. 14) excluded p. 56; *O. canadensis* W. (lectotype selected) & *O. brevoculus* Resser & Howell referred to *Fremontia* [quod vide] p. 57, *O. fremonti* W. *partim* (pl. 37 figs. 16, 19) to *Bristolia* sp. p. 57, Harrington.

Olenellus browni Etheridge excluded from *Xystridura* p. 40, Öpik (3).

Olenellus fremonti (Walcott), *O. cf. O. insolens* (Resser), *O. n. sp.* [undescribed] near *O. bristolensis* (R.) p. 37, RESSER & PALMER in Hewett.

Olenellus fremonti Walcott, *O. sp.* p. 8, PALMER in Nolan et al.

Olenellus thompsoni (Hall), *O. ? sp.* listed p. 1354, Lochman (2).

Olenellus spp. recorded from N.W. Greenland and Spitzbergen; Gen. et spec. indet. II of Winsnes 1955 is apparently identical with *O. ? sp.* II Poulsen 1932 p. 67, Poulsen (6).

Olenid — see "*Taenicephalus*" *longifrons* Kobayashi and "*T. megalops* K. *partim*."

Olenid tentatively recorded p. 53, Öpik (3).

Olenidae see *Olenaspella* gen. n.

Olenidae — *Olenaspella* may be ancestral p. 455, Lochman (1).

Olenoides p. 41, *O. (new)* p. 42, Shaw & DeLand.

Olenoides australis Rusc. text-fig. 10, *O. chañariensis* R. pl. i fig. 8, *O. diamantensis* R. pl. iii figs. 8-9, Rusconi (2).

Olenoides borukaevi Ivsh., *O. opinatus* I., *O. sp. I*, *O. sp. 2* [none seen] p. 7, Ivshin.

Olenoides convexus Lerm. p. 270, *O. sp. p.* 271, Repina.

Olenoides expansus (Walcott), *O. pugio* (W.) p. 12, *O. ? sp.* pp. 16, 18, PALMER in Nolan et al.

Olenoides faldeanus sp. n. p. 116 text-fig. 2 Cambrian Argentina (Mendoza), Rusconi Rev. Mus. Hist. nat. Mendoza 9 3-4 1956.

Olenoides incertus nom. n. for *Marjumi*? *tetonensis* Miller 1936 *partim* (pygidium pl. 8 fig. 21) lectotype [sic] p. 145 Cambrian (Middle) U.S.A. (Wyoming), Shaw J. Paleont. 30 1 1956.

Olenoides serratus (Rominger) pl. i fig. 3, Stoyanow.

Olenoides sp. p. 135, Repina et al.

Olenoides sp. indet. p. 46, Shaw (1).

Olenoides ? sp. p. 21, Palmer (1).

Olentella gen. n. [Familia incerta, compared with *Orygmaspis*, *Wilbernia*, *Idahoia*, *Moustonia* [sic], *Parabolinoides*] p. 64 for type *O. olentensis* sp. n. p. 66 pl. v figs. 1-11, *O. aff. o.* pl. vi figs. 6, 10, *O. shidertensis* sp. n. pl. vi figs. 1-5, 7-9, 11, pl. vii figs. 1-8, *O. sp.* pl. vii figs. 9-10, 12, *O. ? sp.* 2 pl. vii fig. 11 Cambrian (Upper) U.S.S.R. (Kazakhstan), Ivshin Upper Cambrian trilobites of Kazakhstan Part I 1956.

Olenus Dalman 1827 is strictly an objective synonym of *Paradoxides* Brongniart 1822 for which it was a substitute name; proposed to ICZN to designate *Entomostracites gibbosus* Wahlenberg 1821 as type of *O.* and to place *O.* on Official List of Generic Names, Poulsen (1).

Olenus — re-presentation of Kaufmann's 1933 data on lineages pp. 248-251 text-fig. 31, Simpson.

Olenus ? *acanthurus* of Brögger 1882 (non Angelin 1854) see *Peltura praecursor*.

Olenus obliquoensis Rusc. pl. v fig. 9, Rusconi (2).

Olenus sp. p. 21, *O. aff. transversus* Linnaeus p. 23, Öpik (2).

Olenus sp. undet. for *Parabolinella incerta* of Wilson 1954 p. 1343, *Olenus* s.s. for *P. [?] evansi* immature form of Kobayashi 1938 (pl. 16 fig. 14) p. 1345, Wilson.

Onchocephalus parvus Walcott p. 8, PALMER in Nolan et al.

Onchonotellus gen. nov. name proposed provisionally without diagnosis for *Solenopleura subcincta* Lermontova 1951 p. 25, Lermontova Upper Cambrian trilobites and brachiopods from Bosche-Kulya, 1951 [omitted Z.R. 93 11].

Onchonotellus Lermontova 1951 recte gen. n. [Solenopleuridae] diagnosis given, for type *Solenopleura subcincta* L. 1951 p. 26, *O. abnormis* sp. n. p. 28 pl. ix figs. 9-16 Cambrian (Upper) U.S.S.R. (Kazakhstan), Ivshin Upper Cambrian trilobites of Kazakhstan Part I 1956.

Onchopeltis curcunchensis Ruso. pl. vii fig. 5, Rusconi (2).

Onnia see *Cryptolithus*.

Onnia (*Trinucleus*) [sic] cf. *superba*, O. (T.) *gracilis* rare alkali elements content table 1, McKerrow et al. (2).

Onnia verrucosa sp. n. p. 9 fig. 11 (reconstruction) Ordovician (Lower) Argentina (Mendoza), Rusconi Rev. Mus. Hist. nat. Mendoza 9 1-2 1956.

Onnia verrucosa Ruso. pl. xii fig. 11, Rusconi (2).

Opisthoparian trilobite p. 132, Daily.

Orkekeia ornata Ruso. pl. ii fig. 4, Rusconi (2).

Ormathops mirus sp. n. p. 511 (530) pl. i figs. 8-10 Ordovician (Middle) Bohemia, Šnajdr Sborn. út. Úst. geol. 22 [Pal.] 1956.

Orometopus grypos sp. n. Ordovician (Lower) Sweden p. 269 pl. xi figs. 9-12 text-fig. 43B, *O. elatifrons* (Angelin) text-fig. 43A, O. sp. p. 279; *O. e.* of Moberg and Segerberg 1906 *partim* (pl. 7 figs. 4-5) referred to *Agerina praematura* gen. et sp. n. p. 200, Tjernvik Bull. geol. Instn Univ. Upsala 36 2-3 1956.

Orphanaspis Prantl & Přibyl 1949 discussed p. 248, Whittington (1).

Orria sp. p. 12, PALMER in Nolan et al.

Oryctocara aff. *geikiei* (Walcott) p. 43, Öpik (3).

Oryctocephalid new genus [undescribed] p. 43, Öpik (3).

Oryctocephalites cf. *typicalis* Resser p. 43, Öpik (3).

Oryctocephalus discus Whitehouse and *Paradoxides peregrinus* W. may together constitute a sp. of *Lancastria* p. 17; *O.* (undescribed) listed p. 17, Öpik (2).

Oryctocephalus cf. *reynoldsi* and other spp. p. 43, Öpik (3).

Orygmaspis Resser 1936 referred to *Parabolinoidea* fam. n. p. 454, Lochman (1).

Orygmaspis see *Olentella* gen. n.

Osceolia Walcott 1914 referred to *Dikelocephalidae* p. 449, Lochman (1).

Osceolia osceola p. 177 ff., Nelson.

Otarion recorded p. 6, P'an.

Otarion (*O.*) *balanops*, *O.* (*O.*) *unguloides ranunculum*, *O.* (*Novakaspis*) *ceratophthalmum* p. 372, R. & E. Richter (2).

Otarion (*O.*) *convexum* (Hawle & Corda) p. 83 (88), Strnad (2).

Otarion (*Otarion*) *hydrocephalum* (Roemer) discussed with characteristics of subspp. p. 29, *O.* (*O.*) *hydrocephalum* h. excluding the records of Ferrounière 1920 [to *barrandei*] and Péneau 1928 [to *intermedium*] p. 32 text-figs. 1, 1a, *O.* (*O.*) *hydrocephalum barrandei* (Hawle & Corda) excluding the records of Couffon 1924 and Pillet 1949, 1951 [all to *intermedium*] p. 32 text-figs. 2, 2a, *O.* (*O.*) *convexum* (H. & C.) p. 33 pl. ii figs. 2, 3, 6 text-figs. 4, 4a, *O.* (*O.*) *ferrounieriense* [mis-spelt *ferrounieriense* at descr.] sp. n. Devonian (Middle) France (Anjou) including *Cyphaspis gaultieri* of F. 1920 and C. 1924 (*non* Rouault) p. 34 pl. ii figs. 1, 4-5, text-figs. 6, 6a, *O.* (*O.*) *chauffouri* Pillet 1948 [recte 1951] p. 34 text-figs. 5, 5a, *O.* (*O.*) *gaultieri* (Rouault) p. 35 text-figs. 7, 7a, *O.* (*O.*) cf. *gaultieri* p. 36, *O.* (*O.*) sp. 1 for *O.* sp. Pillet 1951 (p. 19), *O.* sp. 2 p. 36 text-fig. 9, *O.* sp. 3 for *O.* sp. Renaud 1942 p. 37, Pillet Bull. Soc. géol. Fr. (6) 6 1-3 1956.

Otarion sp. p. 1034, Swartz & Whitmore.

Pachyaspid recorded p. 173, Öpik in Banks.

Paedumias fragments from N.W. Greenland p. 67, *P. hanseni* Poulsen from Scotland p. 68, Poulsen (6).

Paedumias [sic] *nevadensis* (Walcott) p. 37, Resser & Palmer in Hewett.

Paedumias [sic] *nevadensis* (Walcott), *P.* sp. p. 8, PALMER in Nolan et al.

Pagetia recorded p. 173, ÖPIK in Banks.

Pagetia connexa (Walcott) p. 1382 pl. v figs. 1-6, *P. prindlei* sp. n. Cambrian (Lower) U.S.A. (N.Y.) p. 1382 pl. v figs. 7-10, Lochman Bull. geol. Soc. Amer. 67 10 1956.

Pagetia significans (Eth.), *P.* aff. *s.* p. 40, *P.* cf. *s.* p. 42, ÖPIK (3).

Pagetia cf. *significans* (Etheridge) p. 32, ÖPIK in Ivanac.

Pagetia cf. *significans* (Etheridge) p. 17, ÖPIK (2).

Pagetia cf. *significans* (Etheridge) p. 66, Casey & Gilbert-Tomlinson.

Pagetia sp. p. 167, ÖPIK in Elliston.

Pagetides elegans Rasetti listed p. 1354, Lochman (2).

Pagetiellus lenaicus (Toll) p. 67, *P. tolli* Lerm. p. 85, Suvorova (1).

Pagetina primaeva Lerm. p. 67, *P.* sp. cf. *primaeva* Lerm. p. 45, *P.* sp. p. 49, *P. glabrata* L. p. 96, Suvorova (1).

Pagetina rjonsnitzkii Lerm. p. 271, *P.* sp. p. 270, Repina.

Pagetina rjonsnitzkii Lerm. p. 135, Repina et al.

Pagodia cf. *buda* Resser & Endo p. 65, Casey & Gilbert-Tomlinson.

Palaolenus [sic] sp. p. 271, Repina.

Panarchaeogonus ÖPIK 1937 may belong to Mesotaphraspidinae subfam. n. p. 47, Jaanusson (4).

Papyriaspis recorded p. 41, ÖPIK (3).

Papyriaspis lanceola p. 19, *P.* aff. *l.* p. 20, ÖPIK (2).

Paraaulacopleura see *Aulacopleura*.

Parabasilicus powisi (Murchison) p. 387 ff., Harper.

Parabolina Salter 1849—proposed placing on Official List of Generic Names with type *Entomostracites spinulosus* Wahlenberg 1821, Poulsen (1).

Parabolina acanthura p. 52, Henningsmoen (3).

Parabolina sp. p. 8, Ivshin.

Parabolina sp. undet. listed p. 1343 pl. viii fig. 23, Lochman (2).

Parabolinella incerta (Rasetti) record of Wilson 1954 referred to *Olenus* sp. undet. p. 1343, *P.* [?] *evansi* Kobayashi 1936 type of *Olenaspella* gen. n. to which is also referred *P. occidentalis* W. 1951 p. 1344, *P.* [?] *evansi* immature form of K. 1938 *partim* (pl. 16 fig. 14) may belong to *Olenus* s.s. p. 1345, *P. triarthroides* record of W. 1954 may belong to *P.* ("Mozomia") *hecuba* (Walcott) [suggestion of H. J. Harrington] p. 1348, Wilson.

Parabolinella pentacantha Ruso. pl. ii fig. 2, Rusconi (2).

Parabolinella triarthroides Harrington — statistical comparison of sample from Vermont with holotype, differences not significant p. 1210 table 1 text-fig. 1 (relative growth), Shaw (4).

Parabolinella sp. p. 19, *P.* spp. p. 22, PALMER in Nolan et al.

Parabolinella sp. p. 200, *P.* ? sp. no. 1, *P.* ? sp. no. 2 for Trilobite (pl. 7 fig. 15) of Wiman 1907 p. 201, Tjernvik.

Parabolinoides Frederickson 1949 discussed and referred to *Parabolinoididae* fam. n. p. 454, Lochman (1).

Parabolinoides see *Olentella* gen. n.

Parabolinoididae fam. n. for *Parabolinoides*, *Bernia*, *Croixana*, *Kendallia*, *Maustonia*, *Meeria*, *Orygmaspis*, *Psalaspis*, *Stigmacephalus*, and [*Olenaspella*] p. 454, relations of genera text-fig. 4, Lochman J. Paleont. 30 3 1956.

Parabolinopsis mariana Hoek for *Andesaspis argentinensis* Kobayashi *partim* p. 1347, H. J. HARRINGTON in Wilson.

Parabriscoia Kobayashi 1935 a subjective synonym of *Elkia* Walcott 1925, *P. dolichorachis* K. a synonym of *E. nasuta* W. [quod vide] p. 449, Lochman (1).

Parabriscoia castellanosi Ruso. text-fig. 37, **Ruseconi** (2).

Parabriscoia spp. of Kobayashi referred to *Elkia nasuta* (Walcott) p. 22, **PALMER** in **Nolan et al.**

Paracedaria montanensis (Duncan) p. 21, **Palmer** (1).

Paradechenella see *Dechenella*.

Paradoxiden Emmrich 1844—proposed suppression in favour of *Paradoxides* [corrected to *Paradoxididae*] **Corda** 1847, **Poulsen** (1).

Paradoxides Brongniart 1822 suggested to be placed on Official List of Generic Names with type [selection attributed to **Barrande** 1852] *Entomotrachites paradoxissimus* **Wahlenberg** 1821 [lectotype selected p. 8], *P. tessini* Brongniart an objective synonym of *P. paradoxissimus*, **Poulsen** (1).

Paradoxides bennetti p. 295, **Hutchinson**.

Paradoxides davidis rare alkali elements content table 1, **McKerrow et al.** (2).

Paradoxides hicksi **Salter** p. 18 pl. i figs. 10–12, **Chernysheva** (2).

Paradoxides peregrinus **Whitehouse** and *Oryctocephalus discus* **W.** may together constitute a sp. of *Lan-castrina* p. 17, **Öpik** (2).

Paradoxididae attributed to **Corda** 1847 rather than to **Emmrich** 1844 whose usage [as *Paradoxiden*] it is suggested should be suppressed, **Poulsen** (1).

Parairvingella angustilimbata **Kobayashi**, *P. eurekaensis* **Resser** p. 19, **P. sp.** p. 22, **PALMER** in **Nolan et al.**

Paralejurus see *Scutellum*.

Parakoldinioidia **Endo** 1937 affinities discussed, *P. typicalis* **E.** p. 18 pl. ii figs. 10–12, 13 (reconstruction); *P. concavolimbata* **E.** probably referable to *Tingocephalus* p. 13, **Kobayashi** (1).

Paramansuyella granulosa **Endo** referred to *Kaolishania* and probably a synonym [sic] of *K. granulosa* **Kobayashi** p. 13, **Kobayashi** (1).

Paramegalaspis **Thoral** [considered nom. nud. 1935 as no type was indicated] discussed and referred to *Megistaspis*-group, type designated as *Megalaspis* (*P.*) *immarginata* **T.** 1935; *P. frequens* **T.** probably belongs to *Plesiomegalaspis* p. 64, **Jaanusson** (5).

Paramicmacca siberica **Lermontova** p. 49 pl. ii fig. 4 pars d, pl. iii fig. 3 pars c, **Suvorova** (1).

Paraolenoides medoevi **Ivsh.**, *P. kassini* **I.**, *P. vodorezovi* **I.** [none seen] p. 7, **Ivshin**.

Parapilekia speciosa (**Dalman**) listed p. 279, **Tjernvik**.

Parapoliella sulcata **Tschern.** [not seen], *P. sp.* p. 270, **Repina**.

Parapoliella sp. p. 134, **Repina et al.**

Pararaia (forms belonging to or allied to) pp. 108, 130, *P. tatei* (**Woodward**) discussed p. 131, **Daily**.

Pararedlichia **Hupé** 1952 [recte 1953] a synonym of *Redlichia* p. 282, *P. pulchella* and *P. rochi* **H.** identical or close to *R. noettingi* p. 298, **Schindewolf** (2).

Parehmania (forms apparently referable to) recorded p. 672, **C. R. Longwell** in **Palmer** (3).

Pareops **Hupé** 1952 [recte 1953] a synonym of *Redlichia* p. 282, **Schindewolf** (2).

Paravenkaspis egloni **Kramarenko** listed p. 188, **Ivanova et al.**

Peachella iddingsi (Walcott) p. 8, **PALMER** in **Nolan et al.**

Pedinocephalus gen. n. [Familia incerta, compared with *Amecephalus* & *Kochiella*] p. 57 for type *P. bubli-chenkoi* sp. n. p. 58 pl. ii figs. 1–8, *P. kasakhstanensis* sp. n. p. 60 pl. ii figs. 9–10, ? 11, 12, *P. bykovae* sp. n. p. 62 pl. i figs. 24–26, 28–29, *P. sp.* pl. i fig. 27 Cambrian (Upper) U.S.S.R. (Kazakhstan), **Ivshin** Upper Cambrian trilobites of Kazakhstan Part I 1956.

Peltoura **Milne Edwards** 1840—proposed validation of **Burmeister's** 1843 spelling emendation to *Peltura*, **Stubblefield** (5).

Peltura Milne Edwards 1840—proposed to validate Burmeister's 1843 spelling emendation (from *Peltoura*) and to place the genus on the Official List of Generic Names p. 253, Stubblefield (5).

Peltura minor (Brögger) listed p. 115, *P. scarabaeoides* p. 122, *P. s. acutidens* B. p. 118, *P. ? norvegica* (Moberg & Möller) p. 277, Tjernvik.

Peltura praecursor Westergaard 1909—proposed to be designated as type of *Protopeltura* Brögger 1882, Henningsmoen (2).

Peltura sp. p. 8, Ivshin.

Pemphigaspis appalachia Resser p. 20, LOCHMAN in Bridge.

Periomma sp. p. 8, PALMER in Nolan et al.

Peronopsis recorded p. 173, ÖPIK in Banks.

Peronopsis p. 42, Shaw & DeLand.

Peronopsis elkedraensis (Eth.), *P.* sp. p. 40, *P. scutalis* (Salter) p. 43, ÖPIK (3).

Peronopsis cf. *elkedraensis* (Etheridge) p. 32, ÖPIK in Ivanac.

Peronopsis fallax (Linns.), *P. f.* var. *ferox* Tullb. and forma *magna* Lerm. p. 86, Chernysheva (2).

Peronopsis fallax (Linnarsson) var. *sinopsis* Ivsh. [not seen] p. 7, Ivshin.

Peronopsis jarillensis Rusc. pl. iii fig. 7, Ruseoni (2).

Peronopsis normata Whitehouse p. 17, ÖPIK (2).

Peronopsis cf. *normata* (Whitehouse) p. 156, *P.* sp. p. 155, Thomas & Singleton.

Peronopsis cf. *quadrata* (Tullberg) p. 286, O. P. SINGLETON in Benson.

Peronopsis sp. p. 12, PALMER in Nolan et al.

Peronopsis spp. p. 63, Casey & Gilbert-Tomlinson.

Phacopacea discussed, close relations to Cheiruracea postulated, Temple (1).

Phacopid fragments p. 80, Strnad (1).

Phacopid protaspis for the form referred to *Acidaspis tuberculatus* by Beecher 1893 (refigured) p. 105 pl. xxiv figs. 1-5 text-fig. 1, Whittington (2).

Phacopidae recorded p. 6, P'an.

Phacopidae — removal of Pterygometopinae tentatively suggested p. 426, Temple (1).

Phacopidella ductifrons R. & E. Richter p. 24, Müller.

Phacopidella limaria Perna 1915 p. 191 pl. xlix figs. 6-7, Weber (2).

Phacopidina Bancroft classified into *P.* (*Phacopidina*) and *P.* (*Dreyfussina*) subgen. *nondescrip.* for type *Dalmania exophthalma* Dreyfuss p. 394, HUFÉ in Choubert et al. C.R. Acad. Sci., Paris 242 3 1956.

Phacopoidae Richter 1932 used in preference to Cheiruroidae ÖPIK 1937 for Calymenids, Cheirurids, Pliommerids, Phacopids etc. p. 109, Whittington (2).

Phacops recorded p. 60, Schmidt.

Phacops accipitrinus (Phillips 1836) [sic] with synonym *P. bergicus* Drevermann 1902 p. 159 pl. xli figs. 6-7, Weber (1).

Phacops altaicus Tschernyschew 1893 p. 189 pl. xlviii figs. 4a-c, 5a-c, *P. turanicus* Weber 1932 p. 190 pl. xlviii figs. 6a-c, pl. xlix figs. 1a-b, *P. granulatus* Münster 1840 p. 190 pl. xlix figs. 2a-c, 3a-b, Weber (2).

Phacops cristata, *P. pipa*, *P.* sp. p. 1452, Oliver.

Phacops (*Phacops*) *cryphoides* (R. & E. Richter), *P.* (*Cryphops*) *acuticeps* (Kayser) p. 21, *P.* (*C.*) *cryptophthalmus* (Emmerich) [sic] p. 25, *P.* (*C.*) *ensae* R. & E. R. p. 28, *P.* (*Nephranops*) *incisus incisus* (Roemer) p. 22, *P.* (*Trimeroccephalus*) *mastophthalmus* (Reinh. R.) p. 23, *P.* (*Dianops*) *limbatus* (Reinh. R.), *P.* (*D.*) sp. ex aff. *griffithides* R. & E. R. p. 28, *P.* (*D.*) sp. p. 26, Müller.

Phacops cf. *glockeri* p. 21, Fromaget.

Phacops (*Phacops*) *granulatus* (Mstr) p. 218 text-fig. 15, *P. (Dianops) anophthalmus* (Frech) p. 218 text-fig. 16, Lewowicki.

Phacops khatangensis Web., *P. stokesi* M. Edw. listed p. 188, *P. quadrilineata* Ang. var. *khatangensis* W. pl. viii figs. 2a, 6, B, Ivanova et al.

Phacops [? *Phacops* on pl. expl.] *llanensis* sp. n. p. 6 fig. 4 Ordovician (Lower) Argentina (Mendoza), Rusconi Rev. Mus. Hist. nat. Mendoza 9 1-2 1956.

Phacops llanensis Rusc. pl. xii fig. 4, Rusconi (2).

Phacops nonakai sp. n. Devonian (Middle) Japan (Iwate) p. 43 pl. iii figs. 11a-b, Okubo Japan. J. Geol. Geogr. 27 1 1956.

Phacops rana Green [excluding record of Groth 1912] p. 49 pl. iii figs. 1a-6, *P. fecundus* Barrande p. 51 pl. iii fig. 6, *P. sublatifrons* sp. n. for *P. latifrons* of Peetz 1901 p. 52 pl. iii figs. 4, 5, 8, 9, 13 Devonian (Middle) U.S.S.R. (Kuznetsk), *P. aff. shanensis* Reed p. 55 pl. ii fig. 11 text-fig. 11, Chernysheva Upper Silurian and Devonian trilobites from the Kuznetsk Basin 1951.

Phacops raymondi Delo p. 510, Whittington (3).

Phacops (*P.*) *schlotheimi* Bronn pl. ii figs. 10-12 (sections), *P. (P.) argus* p. 373, R. & E. Richter (2).

Phacops weaveri Salter referred to *Dalmanites* [quod vide] p. 149, *P. w.* of S. 1864 *partim* (pl. 3 figs. 2-3) to *D. sp.* p. 150, Curtis.

Phacops s. str. 2 spp. p. 348, Okubo (1).

Phaetonellus Novák 1890 — discussion of problem whether the valid type is *P. planicauda rhenanus* N. 1890 [designated Vogdes 1925] or *P. planicauda planicauda* (Barrande 1846) [designated Přibyl 1946] p. 544, Richter in Richter & Schmidt.

Phalacroma recorded p. 188, Őpik in Banks.

Phalacroma cf. *glandiforme* (Angelin) p. 286, C. J. Stubblefield in Benson.

Phalacroma lasherensis Rusc. text-fig. 24, Rusconi (2).

Phalacroma nuda (Beyr.) p. 88, *P. sp.* p. 87, Chernysheva (2).

Pharostoma mendozana Rusc. pl. ix fig. 14, Rusconi (2).

Pharostoma cf. *peditoba* (Roemer) p. 380, Jaanusson (6).

Pharostoma pulchrum pulchrum (Barrande) lectotype chosen p. 504, *P. pulchrum vokovicense* subsp. n. p. 505 (530) pl. v fig. 1, pl. vi fig. 1, pl. ii fig. 11 Ordovician (Middle) Bohemia, Šnajdr Sborn. út. Úst. geol. 22 [Pal.] 1956.

Phillipsella Ocklert [recte Oehlert] — support for suppression in favour of *Phillipsinella* Novák 1886, Stubblefield (1).

Phillipsia or related genus p. 55, Nolan et al.

Phillipsia aff. *carringtonensis* Woodw., *P. cf. laticaudata* W. p. 128, *P. sp.* pp. 127, 138, Yavorsky.

Phillipsia coronata sp. n. p. 252 pl. i fig. 13 text-fig. 3, *P. carringtonensis* Etheridge p. 253 pl. i figs. 7-10 text-fig. 4, *P. mugodjarica* sp. n. p. 255 pl. i figs. 1-4 text-figs. 5-6, *P. bitumulata* Weber p. 257 pl. i figs. 5-6, *P. cf. kassini* W. p. 258 pl. i figs. 14-15 Carboniferous (Lower) U.S.S.R. (Mugodzhär), Balashova Annu. Soc. paléont. russe 15 1956.

Phillipsia eichwaldi p. 21, Fro-maget.

Phillipsia labrosa Weber p. 160 pl. xli fig. 19, *P. kazakensis* W. p. 161 pl. xli fig. 20, *P. k.* var. *aryssica* W. pl. xli figs. 18a-b, *P. meisteri* W. pl. xlii figs. 5a-b, *P. kirgissica* W. pl. xlii figs. 6-9, *P. kassini* W. p. 162 pl. xlii figs. 10-12, *P. truncatula* var. *pustulata* Konineck pl. xlii figs. 13-14, *P. derbyensis* var. *kiritchenkoi* W. pl. xlii figs. 15-16, *P. eichwaldi* var. *mucronata* M'Coy p. 163 pl. xlii figs. 17-18, Weber (1).

Phillipsia sp. p. 34, Chow.

Phillipsidae see Phillipsiidae.

Phillipsiidae [emended from Phillipsidae] Oehlert 1886 placed on Official List of Family-Group Names p. 433, Direction 41.

Phillipsinella Novák 1886—supported for validation by suppression of *Phillipsella* Ocklert [recte Oehlert], Stubblefield (1).

Phillipsinella parabola (Barrande) p. 391, Harper.

Phillipsinella parabola (Barr.) p. 258 pl. iv figs. 1–2, Kielan.

Phoidagnostus bituberculatus (Ang.) p. 87, Chernysheva (2).

Phoidagnostus bituberculatus (Angelin) p. 7, Ivshin.

Phoidagnostus sp. p. 158, Thomas & Singleton.

Phoidagnostus sp. p. 36, O. P. SINGLETON in Harris & Thomas.

Phoidagnostus sp. p. 286, O. P. SINGLETON in Benson.

Phylacops recorded p. 6, P'an.

Pichyklen gen. n. [no family assigned], *P. minutissima* sp. n. p. 6 fig. 5 Ordovician (Lower) Argentina (Mendoza), Rusconi Rev. Mus. Hist. nat. Mendoza 9 1–2 1956.

Pichyklen minutissima Rusc. pl. xii fig. 5, Rusconi (2).

Placoparia grandis Hawle & Corda lectotype chosen p. 509 pl. v figs. 2–3, *P. aff. zippei* (Boeck) p. 510 pl. ii figs. 7–8, Šnajdr.

Plaesiacomia rara Hawle & Corda p. 507, Šnajdr.

Planilimbata-group see *Megistaspis*.

Planiscutellum subgen. n. see *Scutellum*.

Platycalymene duplicata rare alkali elements content table 1, McKerrow et al. (2).

Platycolpus crucensis Rusc. pl. iii figs. 4–5, Rusconi (2).

Platycolpus eatoni p. 496, Fredrickson.

Platycolpus sp. p. 179, Nelson.

Platycolpus sp. p. 22, PALMER in Nolan et al.

Platylichas laxatus (M'Coy) p. 389, P. sp. p. 391, Harper.

Platypeltoides Přibyl 1948 referred to Asaphidae, *P. serus* sp. n. including *Niobe laeviceps* of Moberg & Segerberg 1906 *partim* (pl. 6 fig. 17) p. 219 pl. iii fig. 23, pl. iv figs. 1–2 text-fig. 35 B Ordovician (Lower) Sweden, Tjernvik Bull. geol. Instn Univ. Upsala 36 2–3 1956.

Plesiomegalaspis Thoral 1946 discussed and considered either a subgenus of or a synonym of *Kayseraspis* Harrington 1938 [quod vide] p. 63, *Paramegalaspis frequens* T. referred p. 64, Jaanusson (5).

Plesiomegalaspis Thoral 1946 discussed p. 234, *P. (P.) planilimbata* (Angelin) for *Megalaspis* p. A. 1851 type lost p. 235 pl. vi figs. 1–9 text-fig. 38A, *P. (P.) estonica* sp. n. including *M. p.* of Schmidt 1906 p. 238 pl. vi figs. 10–15 text-fig. 39A, *P. (P.)* sp. aff. *estonica* p. 239, *P. (P.) norvegica* sp. n. for *M. p.* of Skjeseth 1952 *partim* (pl. 1 fig. 10) refigured p. 240 pl. vii figs. 1–3 Norway, *P. (P.) scutata* sp. n. p. 241 pl. vii figs. 4–6; *P. (Ekeraspis)* subgen. n. for type *P. (E.) armata* sp. n. p. 242 pl. vii figs. 7–13 text-figs. 38B, 39B, *P. (E.) heroides* (Brögger) for *M. h. B.* 1882 p. 244 pl. viii figs. 1–4; *P. ?* spp. nos. 1 and 2 p. 246 pl. viii figs. 5, 6, *P. ?* sp. no. 3 p. 246 Ordovician (Lower) Sweden & Norway, Tjernvik Bull. geol. Instn Univ. Upsala 36 2–3 1956.

Plethagnostus Clark 1923 a synonym of *Pseudagnostus* p. 12, Ivshin.

Plethagnostus jarillensis Rusc. pl. iii fig. 6, Rusconi (2).

Plethometopus sp. p. 22, PALMER in Nolan et al.

Plethometopus ? sp. p. 35, J. L. WILSON in Bridge.

Plethopeltella Kobayashi 1943 referred to *Iranaspidae* subfam. n. p. 448, Lochman (1).

Plethopeltis saratogensis (Walcott) p. 34, Bridge.

Plethopeltis saurini sp. n. Cambrian (Upper) Yun-nan/Ton-kin p. 281 pl. xl figs. 5–7, Kobayashi Trans. palaeont. Soc. Japan NS No. 24 1956.

Plicatolina kindlei Shaw obsolescence of glabellar furrows tabulated p. 1221 table 7, Shaw (4).

Pliomera martelli Reed 1917 type of *Pliomerina* gen. n. to which *Pliomera* of Weber 1948 *partim* also referred p. 1338, Chugaeva.

Pliomerid recorded p. 53, Öpik (3).

Pliomeridae see *Pliomerina* gen. n.

Pliomerina gen. n. [Pliomeridae] p. 1338 for type *Pliomera martelli* Reed 1917, *Pliomera* [cf. *pseudoarticulata*] of Weber 1948 and *P. Encrinurella* ? *canthifrons* W. 1948 referred to *Pliomerina*, *P. dulanensis* sp. *nondescr.* text-fig. 3 U.S.S.R. (Kazakhstan) Ordovician (Lower). Chugaeva C.R. Acad. Sci. U.R.S.S., NS 111 6 1956.

Pliomerops actinurus (Dalman), *P.* sp. (undescribed) p. 266, Tjernvik.

Pliomerops nevadensis Walcott, *P.* cf. *barrandei* (Billings), *P.* sp. p. 29, Nolan et al.

Pliomerops sp. p. 153, Neuman.

Poliellina lermontovi Polet., *P.* sp. p. 271, Repina.

Poliellina [sic] *lermontovae* Polet. p. 135, Repina et al.

Porabolinella [sic] *mediasiatica* sp. nov. [nom. nud.] p. 8, Ivshin.

Pradesia Thorall 1935 reference to *Isocolidae* discussed p. 1198, Whittington (5).

Primaspis R. & E. Richter 1917 discussed p. 198, *P. primordialis* (Barrande) text-figs. 5A-D, *P. keyserlingi* (B.) discussed, *P. crosotus* (Locke) so referred p. 199, *P. ascitus* sp. n. Ordovician (Middle) U.S.A. (Va) p. 199 pl. i figs. 1-21, pl. ii figs. 1-23 text-figs. 2A, 6A-B, Whittington Bull. Mus. comp. Zool. Harv. 114 5 1956.

Primaspis primordialis (Barrande) p. 499 pl. ii figs. 9-10 text-fig. 5, Snajdr.

Proasaphiscus sp. p. 271, Repina.

Probolium sp. p. 510, Whittington (3).

Proceratocephala Prantl & Přibyl 1949 referred to *Miraspinæ* p. 247, Whittington (1).

Proceratocephala Prantl & Přibyl 1949—*Drummuckaspis* P. & P. 1949 considered a synonym since its type *Acidaspis discreta* Reed 1935 (refigured) is considered a synonym of *P. terribilis* (R. 1914) lectotype selected and figured p. 515 pl. lix fig. 13, pl. lx figs. 2-3, 5-6, 10; *P. terribilis* (R.) *partim* (pl. 6 fig. 9) referred to *Miraspis* ? sp. p. 515 pl. lx figs. 7-8, Whittington (3).

Proceratopyge Wallerius 1895 discussed with synonym *Lopnorites* Troedsson 1937 p. 21, list of referred spp. p. 22, *P. asiatica* sp. n. p. 24 pl. viii figs. 17-23 Cambrian (Upper) U.S.S.R. (Kazakhstan), Ivshin Upper Cambrian trilobites of Kazakhstan Part I 1956.

Proceratopyge recorded p. 22, Öpik (2).

Proceratopyge (*Lopnorites*) *chuhsiensis* sp. n. p. 273 (280) pl. i figs. 1-6, *P.* sp. p. 275 (282) pl. i fig. 7 Cambrian (Upper) China (An-hwei), Lu Acta palaeont. sinica 4 3 1956.

Prochuangia granulosa sp. n. p. 369 (376) pl. i fig. 5 Cambrian (Upper) China (Kwei-chow), Lu Acta palaeont. sinica 4 3 1956.

Proerbia sp. p. 270, Repina.

Proerbia sp. p. 135, Repina et al.

Proerbia sp. p. 96, Suvorova (1).

Proetidae see *Charabaiia* gen. n.

Proetus Steininger 1831 discussed with synonyms *Aeonina* Burmeister 1843 (objective) and *Gerastos* Goldfuss 1843 (subjective) p. 351, *P.* (*P.*) *bohemicus*-group of Přibyl 1946 merged with *P.* (*P.*) *concinus*-group p. 352, *P.* (*P.*) *concinus* (Dalman) p. 353 pl. v figs. 29a-c, 30a-b, *P.* (*P.*) *concinus osiliensis* Schmidt p. 348 pl. i fig. 1, pl. ii fig. 8, *P.* (*P.*) *cuvieri* Steininger neotype chosen and illustrated with synonyms *G. laevigatus* and *G. granulatus* Goldfuss [quæ vide] p. 353 pl. i figs. 2-3, pl. ii figs. 6-7 (sections), pl. iii figs. 13-16, pl. iv figs. 18-22, pl. v figs. 31-33, pl. vi figs. 35-37, text-fig. 1, *P.* (*P.*) *granulosus* (G.) record of Kielan 1954 discussed p. 371, *P.* (*P.*) *margaritaceus* Gürich 1895 a species

dubia p. 372, *P. (P.) prox* sp. n. Devonian (Middle) Germany p. 373 pl. iii figs. 17a-c, pl. iv figs. 23-28, pl. v fig. 34, pl. vi figs. 38a-c, 39a-c, *P. (P.) chamaeleo* p. 372, R. & E. Richter Senck. leth. 37 3-4 1956.

Proetus altepinus Ruse. pl. x fig. 9, *P. pichypuelchensis* R. pl. xi fig. 7, Rusconi (2).

Proetus buchii Corda p. 21 pl. ii fig. 1, *P. subplanatus* Maurer var. *granulata* var. n. [from conglomerates] p. 22 pl. ii figs. 14a-6, *P. peetzi* sp. n. for *P. aff. curvieri* of Peetz 1901 p. 23 pl. ii figs. 6a-6, *P. lazutkini* sp. n. p. 25 pl. i figs. 13-15, *P. kuznetskiensis* sp. n. p. 26 pl. ii figs. 4, 9 Devonian (Middle) U.S.S.R. (Kuznetsk), *P. ex gr. bohemicus* C. p. 28 pl. i fig. 11, *P. aff. laevigatus* Maurer (non Goldfuss) p. 29 pl. ii figs. 7 a-6, *P. sp.* p. 30 pl. ii figs. 10a-6, Chernysheva Upper Silurian and Devonian trilobites from the Kuznetsk Basin 1951.

Proetus indosinensis Mausuy and P. cf. i. p. 452 ff., *P. sp.* p. 458, Yoh.

Proetus latilimbatus Gr. recorded p. 11, P'an.

Proetus pachydermatus p. 1034, Swartz & Whitmore.

Proetus cf. *P. peroccidens* Hall & Whitfield p. 55, Nolan et al.

Proetus pila Weber p. 159 pl. xli figs. 8-9, *P. pila* var. *sargaensis* W. p. 159 pl. xli figs. 10-13 holotypes of both spp. figured, Weber (1).

Proetus sibiricus Tschernyschew 1893 p. 186 pl. xlvii fig. 2, *P. bohemicus* Corda 1847 p. 186 pl. xlvii fig. 3, Weber (2).

Proetus woehrmanni Schmidt 1907 referred to *Agerina* gen. n. [quod vide] p. 198, Tjernvik.

Proetus fragments (recalling *Cornuproetus*) p. 59, *P. sp.* p. 102, Schmidt.

Proetus n. sp. [undescribed] Carboniferous (Lower) p. 42, Girty in Hewett.

Proetus sp. p. 391, Harper.

Proetus sp. p. 635 pl. iv fig. 15, Tsin.

Proetus ? sp. cf. *P. rowi* (Green) p. 2281, Pierce.

"*Proetus*" sp. p. 1452 ff., Oliver.

"*Proetus*" sp. sp. p. 25, Müller.

Promegalaspides Westergård 1939 discussed p. 252, *P. (Borogothus)* subgen. n. for type *Megalaspis stenorhachis* Angelin 1851 type lost [including in synonymy *M. planilimbata* of Skjeseth 1952 (non A.) partim (pl. i fig. 9) and *Ptychopyge* sp. S.] p. 253 pl. ix figs. 6-14 text-fig. 41A, *P. (B.) intactus* (Moberg & Segerberg) for *M. i. M. & S.* lectotype chosen & figured p. 255 pl. x figs. 1-4, *P. (B.) sp.* p. 257 Ordovician (Lower) Sweden & Norway; *P. (B.) goniopleura* (Thoral 1935) so referred p. 253, Tjernvik Bull. geol. Instn Univ. Upsala 36 2-3 1956.

Proparian trilobite (compared with *Pagetia*, *Dipharus*, *Calodiscus*) p. 111, Daily.

Prosaukia recorded p. 1559, Fisher (1).

Prosaukia tentatively recorded p. 22, Öpik (2).

Prosaukia ? recorded p. 45, *P. pp.* 47, 53, Öpik (3).

Prosaukia angulata (Mansuy) p. 281 pl. xl fig. 12, Kobayashi (2).

Prosaukia ? *anomala* Ulrich & Resser referred to *Marela* p. 448, Lochman (1).

Prosaukia curvicostata Ulrich & Resser with synonyms after Raasch 1952 p. 97 pl. i figs. 1-12, *P. sp. cf. P. curvicostata* p. 98 pl. i fig. 13, *P. sp.* A Cambrian (Upper) U.S.A. (Mich.) p. 98 pl. i figs. 14-15, Stumm.

Prosaukia sp. p. 496, Frederickson.

Prosaukia sp. p. 21, Palmer (1).

Prosaukia (2 spp.) p. 65, Casey & Gilbert-Tomlinson.

Protillaenus Raymond 1937 a synonym of *Maryvillia* Walcott 1916 to which its type *P. marginatus* R. is referred p. 1267, Rasetti (1).

Protolenidae R. & E. Richter 1948 discussed p. 31, see Lermontoviinae subfam. n. and Protoleninae, Suvorova (1).

Protolenidae — suggested reference of *Chakasskia* Poletayeva p. 449, Lochman (1).

Protoleninae discussed p. 54 and taken to include *Protolenus*, *Matthewlenus*, *Bergeroniellus*, *Bergeroniopsis*, *Olekmaspis* gen. n., *Lusatiops*, *Coreolenus*, *Hamatolenus*, *Blayacina*, **Suvorova** (1).

Protolenus Matthew 1892 discussed p. 54, *P. dzevanovskii* Lermontova type of *Lermontovia* gen. n. p. 37 to which *P. grandis* L. also referred p. 45, **Suvorova** (1).

Protolenus paradoxoides Matthew text-fig. 1 (drawings), **Suvorova** (2).

Protolenus radegasti Czarnocki probably belongs to *Lusatiops* p. 139, **Samsonowicz**.

Protolloydolithus Williams 1948 raised to generic rank and discussed p. 41, *P. ramsayi* (Hicks) syntypes refigured and locality discussed p. 41 pl. v figs. 9–12, *P. neintianus* sp. n. Ordovician (Middle) Britain (Shropshire) p. 42 pl. v figs. 13–15, pl. vi figs. 1–3 [young forms], *P. reticulatus* (Elles) for *Trinucleoides* r. E. 1940 revised description, *Trinucleus primitivus* Born may belong to *P.* p. 41, **Whittard** *Palaeontogr. Soc. [Monogr.]* 110 1956.

Protopeltura Brögger 1882—proposed to designate as type species *Peltura praecursor* Westergaard 1909 [= *Olenus* ? *acanthurus* B. 1882 non Angelin] and to place genus on Official List of Generic Names, **Henningsmoen** (2).

Protopeltura praecursor (Westergård) listed p. 170, **Tjernvik**.

"*Protopliomerops*" *primigenius* (Angelin) and "*P.*" *toernquisti* (Holm) listed, should be referred to new genus or genera p. 265, **Tjernvik**.

Prozacanthoides eatoni (Walcott) listed p. 1355, **Lochman** (2).

Psalaspis Resser 1937 referred to *Parabolinoidea* fam. n. p. 454, **Lochman** (1).

Psalikilus recorded p. 936, **Sando**.

Pseudagnostus Jaekel 1909 discussed with synonyms *Plethagnostus* Clark, *Euplethagnostus* Lermontova, *Rhaptagnostus* Whitehouse and *Pseudorhaptagnostus* L. p. 11, list of

referred spp. p. 15, *P. pseudocyclopyge* sp. n. p. 17 pl. i figs. 1–8, 10, 16–17, *P. angustilobus* sp. n. p. 19 pl. i figs. 9, 11–15, 18–23 Cambrian (Upper) U.S.S.R. (Kazakhstan), **Ivshin** Upper Cambrian trilobites of Kazakhstan Part I 1956.

Pseudagnostus p. 41, **Shaw & DeLand**.

Pseudagnostus recorded p. 67, **Casey & Gilbert-Tomlinson**.

Pseudagnostus recorded p. 174, **Öpik** in **Banks**.

Pseudagnostus recorded p. 22; pygidium of *Aspidagnostus* referred to *P.* p. 21, **Öpik** (2).

Pseudagnostus recorded p. 45 **Öpik** (3).

Pseudagnostus communis (Hall & Whitfield) p. 19, *P. prolongus* (H. & W.), *P. convergens* Palmer, *P. laevis* P. p. 22, **Palmer** in **Nolan et al.**

Pseudagnostus vastulus Whitehouse, *P.* sp. p. 158, **Thomas & Singleton**.

Pseudagnostus sp. p. 21, **Palmer** (1).

? *Pseudagnostus* sp. p. 275 (282) pl. i fig. 8, **Lu** (1).

Pseudagnostus sp. (compared with *P. vastulus* Whitehouse and *P. convergens* Palmer) p. 367 (375) pl. i figs. 1–2, **Lu** (2).

Pseudagnostus sp. undet. pl. cxlvi fig. 7, **Wilson**.

Pseudagnostus spp. p. 36, **Singleton** in **Harris & Thomas**.

Pseudatops reticulatus (Walcott) listed p. 1354, **Lochman** (2).

Pseudobasiliculus ingens (Barrande) lectotype chosen p. 489, **Šnajdr**.

Pseudobasiliculus nobilis (Barr.) p. 258 pl. ii fig. 6, **Kielan**.

Pseudobasiliculus sp. cf. *P.* sp. **Harper** 1952 p. 391, **Harper**.

Pseudoekeraspis [sic] sp. p. 134, **Repina et al.**

Pseudoetaspis recorded p. 135, Repina et al.

Pseudoetaspis angarensis Tschern. [not seen] p. 270, Repina.

Pseudolevinia macropyge Rusc. text-fig. 38, Rusconi (2).

Pseudomera cf. *P. barrandei* (Billings) p. 2089, Langenheim et al.

Pseudorhaptagnostus Lermontova 1940 [so dated] a synonym of *Pseudagnostus* p. 12, Ivshin.

Pseudosaratogia Wilson 1951 referred to *Idahoiidae* fam. n. p. 459, Lochman (1).

Pseudosphaerexochus cf. *granulatus* (Angelin) p. 391, Harper.

Pseudosphaerexochus n. sp. [undescribed] p. 373, Jaanusson (6).

Pseudosphaerexochus sp. p. 65, V. N. Weber in Yavorsky.

Pseudosphaerexochus [sic] *laticeps* (Linnarsson) p. 258, Kielan.

Pterocephalia p. 41, Shaw & DeLand.

Pterocephalia ? recorded p. 10, A. R. Palmer in McAllister.

Pterocephalia occidens (Walcott), *P. sanctisabae* Roemer p. 19, Palmer in Nolan et al.

Pterocephalia ? sp. p. 21, Palmer (1).

Pterocephaliidae Kobayashi discussed and taken to include *Pterocephalia*, *Aphelaspis*, *Blandicephalus*, *Camaraspis*, *Camaraspoides*, *Dikelocephalites*, *Dytremacephalus*, *Kazelia*, *Labiostria*, *Litocephalus*, *Maladioidella*, *Pterocephalops* p. 458 text-fig. 6; *Camaraspididae* Lochman a synonym, Lochman (1).

Pterocephalina Resser 1938 a synonym of *Litocephalus* R. 1937 [quod vide], Resser's 1942 spp. *grata*, *notha*, *pogonipensis*, *texana* & *utahensis* and *P.* cf. *P. grata* of Wilson 1954 excluded from *L.* but not re-assigned p. 608, Palmer (2).

Pterocephalina bilobata (Hall & Whitfield) p. 19, Palmer in Nolan et al.

"*Pterocephalina*" cf. *P. grata* of Wilson 1954 referred with query to *Labiostria platifrons* Palmer p. 1346, Wilson.

Pterocephalops Rasetti 1944 referred to Pterocephaliidae p. 458, Lochman (1).

Pterygomelopinae — removal from Phacopidae tentatively suggested p. 426, Temple (1).

Pterygomelopus jukesii (Salter) p. 389, Harper.

Pterygomelopus laevigata Schm. p. 23, Röömusoks (1).

Pterygomelopus nieszkowski (Schmidt) p. 59 pl. xxv fig. 4, *P.* cf. *panderi* (S.) p. 60 pl. xxv figs. 5a-6, pl. xxvi figs. 2a-6, Ivanov & Myagkova.

Pterygomelopus recurvus (Olin) p. 258 pl. ii figs. 2-4, Kielan.

Ptychagnostus and *P. ?* recorded p. 173, Öpik in Banks.

Ptychagnostus atavus (Tullberg) p. 373, Lu (2).

Ptychagnostus atavus p. 63, Casey & Gilbert-Tomlinson.

Ptychagnostus australiensis (Chapman) p. 158, Thomas & Singleton.

Ptychagnostus gibbus, *P. atavus*, *P. punctuosus*, *P. aculeatus*—Queensland forms discussed p. 16, Öpik (2).

Ptychagnostus (*Triplagnostus*) cf. *gibbus*, *P.* (T.) spp. p. 43, *P. ?* p. 53, Öpik (3).

Ptychagnostus lyra Lerm. p. 86, *P. atavus* (Tullb.) p. 89, Chernysheva (2).

Ptychagnostus nathorsti (Brögger) p. 286, O. P. Singleton in Benson.

Ptychagnostus nathorsti (Brögger) [form comparable with], and probably *P. punctuosus* (Angelin) p. 287, A. A. Öpik in Benson.

Ptychagnostus pichum Rusc. pl. vi fig. 1, Rusconi (2).

Ptychagnostus (*P.*) *richmondensis* (Walcott), *P.* (*Triplagnostus*) sp. p. 12, Palmer in Nolan et al.

Ptychagnostus sp. p. 167, Öpik in Elliston.

Ptychaspidae discussed and taken to include *Eoptychaspis*, *Ptychaspis*, *Euptychaspis*, *Keithia*, *Keithiella*, *Anderssonella*, *Stigmaspis*, *Coranocephalus*, *Changia*, *Quadraticephalus* and *Saukioides* p. 450 text-fig. 3, **Lochman** (1).

Ptychaspis recorded p. 1559, **Fisher** (1).

Ptychaspis ? recorded p. 53, **Öpik** (3).

Ptychaspis bicostatus Ruse. pl. vii fig. 2, **Ruseoni** (2).

Ptychaspis walcotti Mansuy referred with query to *Eosaukia* p. 281, **Kobayashi** (2).

Ptychaspis sp. p. 496, **Frederickson**.
cf. *Ptychoparella* sp. p. 1393 pl. viii figs. 24–25, **Lochman** (2).

Ptychoparia anderseni Henningsmoen may be a *Lyriaspis* p. 44, **Öpik** (3).

Ptychoparia ? *clavata* Walcott [identity considered doubtful] referred to *Bonnaria* gen. n. p. 1386, *P. fitchi* W. [type of *Hamptonella* Resser 1937] referred to *Kochiella* p. 1393 ; cf. *P. (Liostracus) lata* Cobbold 1913 listed p. 1343, **Lochman** (2).

Ptychoparia richteri Redlich 1899—*Chittidilla plana* King 1941 may be identical p. 282, **Schindewolf** (2).

"*Ptychoparia*" *tchabdensis* sp. n. p. 30 pl. iv figs. 9–11 Cambrian (Middle) U.S.S.R. (Siberia), **Chernysheva** Middle Cambrian trilobites from Eastern Siberia Part I 1953.

Ptychoparia sp. p. 49, **Suvorova** (1).

"*Ptychoparia*" sp. (sensu latissimo) p. 32, **Öpik** in **Ivanac**.

Ptychopariids (undescribed) p. 17, **Öpik** (2).

Ptychopariidae — various trails in L. Cambrian of Salt Range ascribed : *Protichnites* spp. A & B, *Rusophycus didymus* (Salter), *Crossochorda* sp. [quae vide], **Seilacher**.

Ptychoparioid (unidentified) p. 155, **Thomas & Singleton**.

? *Ptychopleurites eurekensis* Kobayashi p. 22, **PALMER** in **Nolan et al.**

Ptychopyge Angelin 1854—proposed designation of *Asaphus angustifrons* Dalman 1827 as type species (Brögger's 1886 "selection" of this sp. being considered not definite), and proposed setting aside of all earlier selections including that by Vogdes 1890 of *P. applanata* A. which is considered nomen dubium p. 360, **Jaanusson** (1).

Ptychopyge sp. Skjeseth 1952 in synonymy of *Promegalaspides (Borogothus) stenorhachis* (Angelin) p. 254 ; *P.* sp. listed p. 133, **Tjernvik**.

"*Quadraticephalus*" aff. *teres* Resser & Endo p. 65, **Casey & Gilbert-Tomlinson**.

Raaschella referred to *Solenopleuridae* s.l., *R. occidentalis* Lochman p. 51 pl. xii figs. 4–5, **Shaw** (2).

Raaschella appalachia (Resser) for *Stenochilina* a. R., *R. bristolensis* (R.) for *Terranovella* b. R. p. 20, **LOCHMAN** in **Bridge**.

Raaschella occidentalis p. 42, **Shaw & DeLand**.

Raaschella ornata Lochman p. 21, **Palmer** (1).

Radiaspis R. & E. Richter 1917 discussed p. 235, **Whittington** (1).

Radiaspis radiata p. 372, **R. & E. Richter** (2).

Raphiophoridae see *Bulbaspis* gen. n.

Raphiophorus globifrons (Olin), *R. gratus* (Barr.), *R. tenellus* (B.) p. 258, **Kielan**.

Raphiophorus ? *ovulum* Weber 1948 referred to *Bulbaspis* gen. n. [quod vide] p. 1336, **Chugaeva**.

Rasettia cf. *R. capax* (Billings) p. 1348, **Wilson**.

Rasettia sp. p. 22, **PALMER** in **Nolan et al.**

Rawlinsella gen. n. [no family assigned] for type *Acrocephalites ? glomeratus* Walcott 1916 horizon and locality discussed, holotype refigured p. 47 pl. ix figs. 7–9 Cambrian (? Middle) U.S.A. (Wyoming), **Shaw** *J. Paleont.* 30 1 1956.

Raymondaspis brevicauda sp. n. p. 262 pl. x fig. 18, *R. infundibularis* sp. n. p. 263 pl. x fig. 19, *R. sp. no. 1* p. 263, *R. sp. no. 2* including *Holometopus limbatus* of Wiman 1906 (non Angelin) and *R. l.* of Skjeseth 1952 p. 263 Ordovician (Lower) Sweden, *R. cf. l. (A.)* listed p. 148, **Tjernvik** Bull. geol. Instn Univ. Upsala 36 2-3 1956.

Redlichina [sic] *vologdini* Lerm. p. 271, **Repina**.

Redlichia Cossmann 1902 discussed with synonyms *Neoredlichia* Saito, *Mesodema* Whitehouse, *Redlichops* R. & E. Richter, *Pararedlichia*, *Pareops*, *Latiredlichia*, *Saukandops*, *Archaeops*, *Kuanyangia* Hupé p. 282ff., *R. noettingi* (Redlich) with synonyms vars. *lata* and *angusta* R. p. 293 pl. vi figs. 1-15, pl. vii figs. 1-6, text-figs. 1-5, following spp. considered identical or close to *R. noettingi* — *nobilis* Walcott, *mansuyi* Resser & Endo, *carinata*, *walcotti* Mansuy, *forresti* Etheridge, *idonea* Whitehouse, *L. saitoi* H., *M. venulosa* W., *Pararedlichia pulchella*, *P. rochi* H. p. 298, following spp. identical or close to each other — *chinensis* W., *verneui* (Mans.) + *yunnanensis* R. & E., *murakamii*, *manchuriensis* R. & E., *P. subtransversa* H. p. 298, **Schindewolf** (2).

Redlichia — occurrences in Queensland discussed and referred to Middle Cambrian p. 9, *R. idonea* Whitehouse and *R. chinensis* Walcott p. 17, **Öpik** (2).

Redlichia recorded p. 41 ff., *R. faunas* of N. Australia referred to Middle Cambrian p. 48, **Öpik** (3).

Redlichia recorded p. 20, H. D. **YANG** in **P'an**.

Redlichia recorded p. 39, *R. forresti* (Eth.) p. 40, **Traves** (1).

Redlichia recorded p. 82, **Traves** (2).

Redlichia cf. chinensis Walcott recorded p. 373, **Lu** (2).

Redlichia aff. nobilis Walcott p. 115, *R. n. sp.* [undescribed] p. 126, **Daily**.

Redlichia noettingi (Redl.) — description of trails in L. Cambrian of Salt Range ascribed to this sp. :

Diplichnites sp., *Dimorphichnus obliquus* gen. et sp. n., *Rusophycus bilobatus* [quae vide], **Seilacher**.

Redlichia 2 sp. p. 31, **Öpik** in **Ivanac**.

Redlichiiidae Poulsen — *Latiredlichiiidae* Hupé a synonym p. 289, **Schindewolf** (2).

Redlichina sp. p. 135, **Repina et al.**

Redlichops R. & E. Richter 1941 a synonym of *Redlichia* p. 282, **Schindewolf** (2).

Reedops deckeri Delo p. 510, **Whittington** (3).

Remopleurides cf. emarginatus Törnq. p. 379, **Jaanusson** (6).

Remopleurides aff. nanus of Skjeseth 1952 referred with query to *Remopleuridiella* sp. no. 2 p. 204, **Tjernvik**.

Remopleurides ? occidens Phleger p. 2091, **Langenheim et al.**

Remopleurides sp. p. 389, **Harper**.

Remopleurides sp. p. 70, V. N. **WEBER** in **Yavorsky**.

Remopleuridiella Ross 1951 discussed, *R. sp. no. 1* p. 203 pl. ii figs. 5-6 text-fig. 31, *R. sp. no. 2* including with query *Remopleurides aff. nanus* of Skjeseth 1952 p. 204 Ordovician (Lower) Sweden, **Tjernvik**.

Resseraspis caetensis [spelt *cactensis* in places] sp. n. p. 14 fig. 14 Cambrian (Upper) Argentina (Mendoza), **Rusconi** Rev. Mus. Hist. nat. Mendoza 9 1-2 1956.

Resseraspis cactensis Rusc. pl. xii fig. 14, **Rusconi** (2).

Rhaptagnostus Whitehouse 1936 a synonym of *Pseudagnostus* p. 12, **Ivshin**.

Rhinaspis Remelé 1885 a homonym of *Rhinaspis* Perty 1830, *R. erratica* R. 1885 considered nom. nud. and may belong to *Megistaspis (M.) hyorrhina* (Leuchtenberg) p. 69, **Jaanusson** (5).

Richardsonella eurekensis Kobayashi, *R. sp. p. 22*, **PALMER** in **Nolan et al.**

Richardsonella sp. undet. p. 1347 pl. oxlvi figs. 4-6, Wilson.

Rinconia Hupé 1952 [recte 1953] referred to Lermontoviinae subfam. n. p. 37, Suvorova (1).

Rondocephalus mirandus Pokr. MS [nom. nud.] p. 271, Repina.

Rowia sp. p. 18, PALMER in Nolan et al.

Saltaspis viator sp. n. p. 201 pl. ii figs. 1-3 text-fig. 30, S. sp. Tjernvik p. 203 pl. ii fig. 4 Ordovician (Lower) Sweden, Tjernvik Bull. geol. Instn Univ. Upsala 36 2-3 1956.

Salterolithus harnagensis Bancroft p. 386, Harper.

Sao Barrande 1846 proposed validation (by suppression of *Sao* Billberg 1820) and addition to Official List of Generic Names, *Staurogmus* an objective synonym and *Monadina* Barrande 1846 a contemporaneous subjective synonym of *Sao* [which is formally given precedence over the latter p. 132], Poulsen (2).

Saratogia Walcott 1916 referred to Idahoiidae fam. n. p. 459, Lochman (1).

Saukia Walcott 1914 discussed, type *S. lodensis* (Whitfield 1880) with synonym *S. ornata* Ulrich & Resser 1933, *S. acuta* U. & R. discussed and considered not the type of *S.* p. 452, Lochman (1).

Saukia ? recorded p. 65, Casey & Gilbert-Tomlinson.

Saukia ? recorded p. 53, Öpik (3).

Saukiandops Hupé 1952 [recte 1953] a synonym of *Redlichia* p. 282, Schindewolf (2).

Saukiella pyrene p. 177 ff., *S. pepinensis* p. 179, Nelson.

Saukiella sp. p. 22, PALMER in Nolan et al.

Saukiidae discussed and taken to include *Saukia*, *Calvinella*, *Lichengia*, *Prosaukia*, *Saukiella* and *Tellerina* p. 451 text-fig. 3, Lochman (1).

Saukiinae indeterminable genus p. 65, Casey & Gilbert-Tomlinson.

Scabriscutellum subgen. n. see *Scutellum*.

Schistocephalus sp. p. 271, Repina.

Schivelicus parvius Pokr. MS [nom. nud.] p. 271, Repina.

Schivelicus parvus Pokr. MS [nom. nud.] p. 135, Repina et al.

Scotiella apiculata (Salter) p. 387, Harper.

Scutelluidae discussed p. 100, phylogeny text-fig. 5, classified into *Scutellum*, *Eobronteus* and *Stoermeraspis* [quae vide]; *Bronteopsis* excluded, R. & E. Richter (1).

Scutelluidae see *Dulanaspis* gen. n.

Scutellum Pusch 1833 discussed, *S. (Scutellum)* with synonym *Dicranactis* Corda 1847 [quod vide] p. 101, *S. (S.) costatum* P. with synonym *Bronteus granulatus* Goldfuss pl. ii figs. 7-8 (drawings), *S. (S.) alutaceum* (Goldfuss 1843) lectotype selected and figured p. 95 pl. vi fig. 38, pl. vii figs. 45-46, *S. (S.) alutaceum geesense* subsp. n. p. 96 pl. vi fig. 39, pl. vii figs. 43, 44, 44 A Devonian (Middle) Germany (Eifel), *S. (S.) flabelliferum* (G. 1839) lectotype figured with synonym *B. intermedius* G. 1843 (refigured) p. 96 pl. vii figs. 40-42, 42A, text-fig. 2; *S. (Kolihapeltis)* Prantl & Přibyl 1947 discussed p. 101, *S. (K.) parabolinum* (Barrande 1882) pl. i fig. 3 (drawing); *S. (Paralejurus)* Corda 1847 with synonym *Holomeris C.* 1847 [quod vide] p. 102, *S. (P.) campaniferum* (Beyrich 1845) text-figs. 3a-e, *S. (P.) brongniarti* (Barrande 1852) with synonym *Holomeris aulicus C.* 1847 p. 99 text-fig. 4; *S. (Planiscutellum)* subgen. n. p. 102 for type *Bronteus planus C.* 1847 pl. i fig. 2 (drawing), pl. iii figs. 16, 17a-b Silurian Bohemia; *S. (Scabriscutellum)* subgen. n. p. 102 for type *Bronteus scaber* Goldfuss 1843 lectotype selected and figured with synonym *B. canaliculatus G.* [lectotype selected] p. 97 pl. i fig. 6 (drawing), pl. ii figs. 9 a-b (drawings), pl. iv fig. 25 (restoration), pl. v figs. 26-31, pl. vi figs. 34a-b Devonian (Middle) Germany (Eifel), *S. (Scab.) opilio* sp. n. p. 104 pl. vi fig. 35 Devonian (Upper) Germany (Wester-

wald), *S. (Scab.) insignitum* (Beyrich 1846) lectotype selected and figured p. 105 pl. vi fig. 36, *S. (Scab.) maurum* (R. & E. Richter 1943) pl. vi fig. 37 [these three spp. constituting *opilio*-group], *S. (Scab.) minus* (Roemer 1850) lectotype selected and figured p. 105 pl. v fig. 33, *S. (Scab.) alternans* (R. 1855) lectotype selected and figured p. 106 pl. v fig. 32; *S. (Thysanopeltis) C. 1847* discussed p. 102, 89ff., *S. (T.) acanthopeltis* (Barrande 1852) holotype refigured with synonym *B. halli* Woodward 1910 (refigured) p. 92 pl. iv figs. 19-23, *S. (T.) laciniatum* (Sandberger) p. 95 pl. iv fig. 24, *S. (T.) speciosum* (C. 1847) pl. ii fig. 10 (reconstruction); *S. (S.) furciferum*-group of P. & P. 1947 referred to *S. (Kolihapeltis)* p. 92, **R. & E. Richter** Senck. leth. **37** 1-2 1956.

Scutellum see *Bronteus*.

Scutellum (Scutellum) larval form probably of *S. (S.) alutaceum geesense* R. & E. Richter p. 474 pl. i fig. 2, *S. (Kolihapeltis)* derivation discussed p. 470, *S. (Weberopeltis)* Maksimowa 1957 may be an independent genus p. 470n, *S. (Thysanopeltis)* phylogeny discussed p. 471, *S. (T.) speciosum* (Corda) pygidium p. 468 pl. i fig. 1, **R. & E. Richter** (3).

Scutellum (S.) alutaceum geesense, *S. (S.) flabelliferum*, *S. (Scabriscutellum)* *scabrum*, *S. (Thysanopeltis)* *acanthopeltis* p. 372, **R. & E. Richter** (2).

Scutellum (Thysanopeltis) cf. *speciosum* Hawle & Corda 1847 p. 73 (80), **Štrnad** (1).

Selenecemidae see *Falanaspis* gen. n.

Selenoharpes excavatus (Linnarsson), *S. spp.* p. 268, **Tjernvik**.

Selenopeltinae Corda 1847 so considered for *Selenopeltis* alone p. 279, **Whittington** (1).

Selenopeltis Corda 1847 discussed and referred to Selenopeltinae, *S. buchi* (Barrande) text-figs. 2D, 25 A-C, **Whittington** (1).

Selenopeltis buchi buchi (Barrande) p. 501 pl. v figs. 5-7, **Šnajdr**.

Selenopeltoides Prantl & Přibyl 1949 discussed p. 248, **Whittington** (1).

Semicyclocephalis terminalis Ivsh. [not seen] p. 7, **Ivshin**.

Semisphaerocephalus nominalis Ivsh., *S. grandis* I. [not seen] p. 7, **Ivshin**.

Semnocephalus Resser 1942 implied synonymy with *Modocia* Walcott 1924 to which its type *Solenopleura ? weedi* W. 1899 is referred as a synonym of *M. centralis* (Whitfield), *S. minor* R. validity unknown p. 141, **Shaw** (3).

Semnocephalus cf. *S. centralis* (Whitfield) p. 22, **Palmer** (1).

Serrodiscus speciosus (Ford) p. 1381 pl. v figs. 13-21, **Lochman** (2).

Shantungia referred to *Dorypygellinae* p. 9, **Kobayashi** (1).

Shirakiella Kobayashi 1935 possible relations with Parabolinoididae fam. n. discussed p. 456, *S. laticonvexa* K. a synonym of *Coosia tokunagai* K., **Lochman** (1).

Shirakiella ? recorded p. 65, **Casey & Gilbert-Tomlinson**.

Shirakiella sp. p. 282, **Kobayashi** (2).

Shumardia pusilla — discussion of Stubblefield's 1926 developmental series p. 477, **R. Richter** in **R. & E. Richter** (3).

Shumardia cf. *pusilla* (Sars), *S. nericiensis* Wiman, *S. sp.* listed p. 277, **Tjernvik**.

Sinosaukia recorded p. 65, **Casey & Gilbert-Tomlinson**.

Skemmatopyge tietzei R. & E. Richter p. 218 text-fig. 13, **Lewowicki**.

Sokhretia subgen. n. of *Kloučekia* [quod vide].

Solenoparia recorded p. 173, **ÖPIK** in **Banks**.

Solenoparia recorded p. 287, **ÖPIK** in **Benson**.

Solenoparia recorded p. 85, **Traves** (2).

Solenoparia sp. nov. [undeser.] p. 52, **Traves** (1).

Solenoparia n. sp. [undeser.] p. 156, **Thomas & Singleton**.

Solenoparia sp. p. 168, **ÖPIK** in **Elliston**.

Solenopleura Angelin 1854 discussed p. 34, *S. lenaica* Lermontova p. 35 pl. v fig. 5, *S. djainensis* L. p. 40 pl. v fig. 6, *S. flerovae* L. MS sp. n. p. 42 pl. v figs. 1-4, *S. zverewi* L. p. 45 pl. v figs. 7-9, *S. magna* sp. n. p. 48 pl. v fig. 10, *S. recta* sp. n. p. 50 pl. v fig. 11, *S. bulusensis* L. MS sp. n. p. 52 pl. v figs. 14-15, *S. urjakhensis* sp. n. p. 54 pl. v figs. 12-13, pl. i fig. 9 *pars* Cambrian (Middle) U.S.S.R. (Siberia), *S.* sp. p. 86, **Chernysheva** Middle Cambrian trilobites from Eastern Siberia Part I 1953.

Solenopleura (*Asthenopsis*) *levior* p. 19, **Öpik** (2).

Solenopleura nana Ford 1878 type of *Fordaspis* gen. n. [quod vide] p. 1387, *S.?? tumida* Walcott 1887 referred to *F.* p. 1390, *S. nana* of Walcott 1886 [which was chosen by Resser 1937 as "lectotype" of *nana*], 1887, 1891 referred to *Kootenia trogensis* Resser p. 1391, **Lochman** (2).

Solenopleura suavis Ivsh., *S. superconvexa* I., *S. lata* I. [none seen] p. 7, **Ivshin**.

Solenopleura subcineta Lermontova 1951 type of *Onchonotellus* gen. n. [quod vide].

Solenopleura? *weedi* Walcott a synonym of *Modocia centralis* (Whitfield) [quod vide] p. 141, **Shaw** (3).

Solenopleurella kolbina Repina MS [nom. nud.] p. 270, **Repina**.

Solenopleurella sp. (Walcott) p. 16, **PALMER** in **Nolan et al.**

Solenopleurella sp. p. 96, *S.?* sp. p. 52, **Suvorova** (1).

Solenopleuridae see *Onchonotellus* gen. n.

Sonoraspis — *Bathyriscus howelli* var. *lodensis* Clark may be referable, *S. mohavensis* (Resser) for *Glossopleura m.* R. [which was based on part of type material of *B. h.* var. *lodensis* (refigured)] p. 680 pl. i fig. 1 *pars*, **Stoyanow**.

Sphaerexochus calvus McCoy p. 376, **Jaanusson** (6).

Sphaerexochus cf. *calvus* M'Coy p. 65, V. N. **WEBER** in **Yavorsky**.

Sphaerexochus? sp. p. 268 pl. x fig. 22, **Tjernvik**.

Sphaerocoryphe sp. p. 391, **Harper**.

Sphaerophthalmus major Lake listed p. 115, *S. alatus* (Boeck) p. 131, **Tjernvik**.

Spinagnostus pedrensis Rusc. text-fig. 23, *S. cerrillensis* R. pl. iv fig. 13, **Rusconi** (2).

Stapeleyella inconstans sp. nov. [Whittard 1955] pl. v figs. 1-6, *S. murchisoni* (Salter) lectotype and syntype figured pl. v figs. 7-8, **Whittard**.

Staurocephalus clavifrons Ang. p. 258 pl. iii figs. 3-4, **Kielan**.

Staurocephalus sp. p. 70, V. N. **WEBER** in **Yavorsky**.

Staurogmus Corda 1847 an objective synonym of *Sao Barrande* 1846 [quod vide], and *S. muricatus* C. 1847 of *Sao hirsuta* B. 1846 p. 132, **Poulsen** (2).

Stenochilina appalachia Resser referred to *Raaschella* p. 20, **LOCHMAN** in **Bridge**.

Stenopareia linnarssoni (Holm) p. 376, **Jaanusson** (6).

Stenopareia panderi (Barrande) lectotype chosen with synonyms *Illaeus laticeps* and *I. attenuatus* Hawle & Corda [to which it is preferred on grounds of long usage] p. 496 pl. i fig. 4 text-figs. 3-4, **Šnajdr**.

Stenorhachis gen. n. [Asaphidae] p. 54 for type *Isoteloides? genalticurvatus* Hintze 1953 text-figs. 2 A-C Ordovician (Lower) U.S.A. (Utah), **Hintze & Jaanusson** Bull. geol. Instn Univ. Upsala 36 1 1956.

Stigmacephalus Resser 1936 referred to *Parabolinoididae* fam. n. p. 454, **Lochman** (1).

Stoermeraspis Prantl & Přibyl 1947 discussed pp. 87, 103, *S. franconica* (Gümbel) discussed p. 88 holotype refigured pl. iv figs. 18 A, a, b, pl. i fig. 4 (drawing), **R. & E. Richter** (1).

Stoermeraspis Prantl & Pribyl 1947 a subjective synonym of *Octobronteus* Weber 1945 p. 473, **R. & E. Richter (3).**

Strenuaeva ? groenlandica (Poulsen) so referred p. 78, C. POULSEN in **Troelsen.**

Strigigenalis Whittington & Ross 1953 referred to *Lecanopygidae* p. 448, **Lochman (1).**

Sulcocephalus see *Tatulaspis* **gen. n.**

? *Symphysops planus* **sp. n.** p. 8 fig. 13 Ordovician (Lower) Argentina (Mendoza), **Rusconi** Rev. Mus. Hist. nat. Mendoza 9 1-2 1956.

Symphysops planus Rusc. pl. xii fig. 13, **Rusconi (2).**

Symphysurina recorded p. 1560, **Flower.**

Symphysurina eurekensis (Walcott), *S. spicata* Ulrich, *S. n. sp.* [undescri.] p. 26, *S. sp.* p. 27, **COOPER in Nolan et al.**

Symphysurina huentotiana Rusc. pl. vii fig. 8, **Rusconi (2).**

Symphysurina ? oriens (Moberg & Segerberg) for *Illaenus o. M. & S.* 1906 refigured p. 217 pl. iii figs. 12-18, *S. ? perseverans* **sp. n.** p. 218 pl. iii figs. 19-22 Ordovician (Lower) Sweden, **Tjernvik** Bull. geol. Instn Univ. Upsala 36 2-3 1956.

Symphysurus (S.) angustatus (Sars & Boeck) with synonym *S. socialis* Linnarsson p. 211 pl. ii figs. 24-25, *S. sp.* p. 212; *S. breviceps* Angelin type of *Varvia* **gen. n.** p. 212, **Tjernvik.**

Syspacheilus cf. *S. dunoirensis* (Miller), *S. cf. S. occidentis* **Lochman** p. 22, **Palmer (1).**

Taenicephalus Ulrich & Resser 1924 referred to *Parabolinoidea* **fam. n.** p. 454, **Lochman (1).**

Taenicephalus cordillerensis Miller with synonyms *T. holmesi*, *T. speciosus*, *T. wyomingensis* Resser spp. p. 559 pl. lxvii figs. 3-4, **DeLand & Shaw.**

Taenicephalus cordillerensis p. 42, **Shaw & DeLand,**

"*Taenicephalus*" *megalops* Kobayashi [excluding K. 1938 pl. 16 fig. 35 as probably an Olenid pl. cxlvi fig. 17] excluded from *Taenicephalus* p. 1346 pl. cxlvi fig. 16, "*T.*" *longifrons* K. considered an Olenid p. 1346 pl. cxlvi figs. 18, 19, 20 **pars, Wilson.**

Talbotina p. 42, **Shaw & DeLand.**

Tasmanocephalus Kobayashi 1936 discussed and referred tentatively to *Kaolishaniinae* p. 16, *T. stephensi* (Etheridge) p. 17 pl. ii figs. 2a-b (drawings), **Kobayashi (1).**

Tatonaspis **sp. p.** 22, **PALMER in Nolan et al.**

Tatulaspis **gen. n.** (replacement name for *Tollaspellus* Ivshin 1953 nom. nud.) [Familia incerta, compared with *Sulcocephalus*] p. 72 for type *T. princeps* **sp. n.** p. 73 pl. ix figs. 1-4 Cambrian (Upper) U.S.S.R. (Kazakhstan), **Ivshin** Upper Cambrian trilobites of Kazakhstan Part I 1956.

Teinistion referred to *Dorypygellinae* p. 9, **Kobayashi (1).**

Teinistion typicalis of Kobayashi 1931 (non Monke) *partim* pl. 20 fig. 17 referred to synonymy of *Drepanura ketteleri* M. var. p. 280, **Kobayashi (2).**

Telaecomarrolithus Williams 1948 considered a full genus pp. 49, 65, *T. radiatus* (Murchison) syntype figured and type locality discussed p. 65 pl. ix figs. 4-5, *T. sp. indet.* p. 66 pl. ix fig. 6, **Whittard.**

Telephus recorded p. 6, **P'an.**

Tellerina ? recorded p. 53, **Öpik (3).**

Tellerina (trilobite resembling) p. 67, **Casey & Gilbert-Tomlinson.**

Tellerina leucosia p. 177ff., *T. crassimarginata* p. 179, **Nelson.**

Tellerina marica (Walcott) p. 22, **PALMER in Nolan et al.**

Terranovella typicalis Resser listed; *T. bristolensis* R. referred to *Raaschella* p. 20, **LOCHMAN in Bridge.**

Thielaspis **gen. nov.** [nom. nud.] *thielei* (Chapman), *T. minima* (C.) p. 36, **SINGLETON in Harris & Thomas,**

Thielaspis (n. gen.) [nom. nud.] *thielei* (Chapman), *T. minima* (C.) p. 158, SINGLETON in Thomas & Singleton.

Thysanopeltis see *Scutellum*.

Thysanopeltis gaeispinosa Okubo MS [nom. nud.], *T. halli* p. 347, Okubo (1).

Thysanopyge Kayser 1898 referred to *Megistaspis*-group p. 65, Jaanusson (5).

Tingocephalus — *Parakoldinioidia concavolimbata* Endo probably referable p. 13, Kobayashi (1).

Toernquistia discussed, possible affinities with *Hystriurids* p. 41, Jaanusson (4).

Toernquistiidae Hupé 1953 placed on Official List of Family-Group Names p. 434, Direction 41.

Tolanaspis almaematrix Ivsh., *T. angustifrons* I. [not seen] p. 7, Ivshin.

Tollaspellus Ivshin 1953 nom. nud. replaced by *Tatulaspis* gen. n. p. 72 n, Ivshin.

Tomagnostus canotensis Rusc. text-fig. 43, Rusconi (2).

Tomagnostus fissus (Lundgr.) p. 86, Chernysheva (2).

Tonkinella p. 41, Shaw & DeLand.

Tonkinella sp. p. 271, Repina.

Tonkinella sp. p. 135, Repina et al.

Tostonia Walcott 1924 referred to *Eurekiidae* p. 450, Lochman (1).

Tostonia iole (Walcott) p. 22, PALMER in Nolan et al.

Trachycheilus see *Ithyektyphus* gen. n.

Tretaspis Murchison 1839 suppression urged p. 52, Stubblefield & Whittington.

Tretaspis McCoy 1849 proposed validation (by suppression of *T. Murchison* 1839) and addition to Official List of Generic Names p. 53, Stubblefield & Whittington.

Tretaspis granulata (Wahlenburg) p. 390 ff., Harper,

Tretaspis granulata bucklandi (Barr.) p. 258 pl. i figs. 1-3, *T. seticornis* (His.) p. 258 pl. ii fig. 5, Kielan.

Tretaspis seticornis (His.) p. 379, Jaanusson (6).

Triarthropsis pampanum Rusc. pl. v figs. 1-3, Rusconi (2).

Triarthrus angelini Linnarsson listed p. 277, *T. sp.* p. 201, Tjernvik.

Tricrepicephalus anarusconii Rusc. pl. vi figs. 2-4, *T. nahuelus* R. pl. vi fig. 5, *T. serranus* R. pl. vi fig. 6, Rusconi (2).

Tricrepicephalus magnispinus (Walcott), *T. thoosa* (W.), *T. walcotti* Lochman, *T. comus* (W.) p. 20, LOCHMAN in Bridge.

Tricrepicephalus cf. *T. texanus* (Shumard), *T. cf. T. coria* (Walcott), *T. sp.* p. 22, Palmer (1).

Trigonocerca Ross 1951 may be referred to either *Megistaspis*-group or *Isotelus*-group p. 66, Jaanusson (5).

Trigonocerca ? recorded p. 936, Sando.

Trigonocerca [sp. undet.] of Wilson 1954 see *Asaphellus* [sp. undet.].

Trilobites cornigerus Schlotheim 1820 considered nomen dubium and suppression urged [see also *Asaphus*], Jaanusson (3).

Trilobus punctatus Brünnich 1781 probably a synonym of *Asaphus hausmanni* Brongniart 1822, suppression urged in favour of *Entomotrachites punctatus* Wahlenberg 1821 [quod vide] and in order to protect *Encrinurus* Emmrich 1844 and *Odontochile* Hawle & Corda 1847, Tripp & Whittard.

Trimericephalus see *Phacops*.

Trimericephalus ocellatus Perna 1915 p. 190 pl. xlix figs. 4a-c, 5, Weber (2).

Trinodus agnostiformis McCoy p. 391, Harper.

Trinodus mobergi sp. n. for *Agnostus trinodus* var. *Moberg* & *Segerberg* 1906 p. 195 pl. i figs. 18-19 text-fig. 28A, *T. elliptifrons* sp. n. for *A. lentiformis* of Wiman 1905 refigured

(non Angelin) p. 196 pl. i figs. 16-17 text-fig. 28B Ordovician (Lower) Sweden, *T. lentiformis* (A.) type apparently lost p. 196, Tjernvik Bull. geol. Instn Univ. Upsala 36 2-3 1956.

Trinodus tardus (Hawle & Corda) p. 258 pl. i figs. 4-6, Kielan.

Trinodus sp. p. 155, Neuman.

Trinucleid rare alkali elements content table 1, McKerrow et al. (2).

Trinucleidae Emmrich 1844 so ascribed p. 52, Stubblefield & Whittington.

Trinucleidae see *Costonia* and *Bettonia* genn. n.

Trinucleoides reticulatus Elles 1940 referred to *Protolloydolithus* p. 41, Whittard.

Trinucleus Link 1807 suppression urged, *T. tuberculatus* L. 1807 considered unidentifiable and suppression urged p. 52, Stubblefield & Whittington.

Trinucleus Murchison 1839 proposed validation (by suppression of *T.* Link 1807) and addition to Official List of Generic Names p. 53, Edgellia Shaw 1950 an objective synonym; type of *Trinucleus* (selected by Vogdes 1890) taken to be *T. fimbriatus* M. 1839 lectotype selected p. 51, Stubblefield & Whittington.

Trinucleus Murchison 1839 discussed, type taken to be *T. fimbriatus* M. (designated by Vogdes 1890) lectotype figured p. 45 pl. vi fig. 4, *T. acutofinalis* sp. n. Ordovician (Middle) Britain (Shropshire) p. 46 pl. vi figs. 5-11; Edgellia Shaw 1950 [quod vide] a synonym of *T.* p. 45; *T. primitivus* Born may belong to *Protolloydolithus* p. 41, *T. chamberlaini* and *T. (Cryptolithus) gibbosus* Elles restr. referred to *Bettonia* gen. n. [quod vide] p. 67, *T. (C.) gibbosus* E. partim to *Cryptolithus* sp. p. 68 pl. ix fig. 16, *T. gibbifrons* McCoy 1849 considered nomen dubium and Reed's 1914 selection of neotypes not accepted p. 68, Whittard Palaeontogr. Soc. [Monogr.] 110 1956.

Trinucleus bueyensis sp. n. p. 10 fig. 2 Ordovician (Lower) Argentina (Mendoza), Rusconi Rev. Mus. Hist. nat. Mendoza 9 1-2 1956.

Trinucleus bueyensis Rusc. pl. xii fig. 2, Rusconi (2).

Trinucleus fimbriatus rare alkali elements content table 1, McKerrow et al. (2).

Trinucleus cf. *ornatus* p. 21, Fromaget.

Triplagnostus see *Ptychagnostus*.

Triplagnostus recorded p. 173, ÖPIK in Banks.

Triplagnostus australiensis (Chapman) p. 36, SINGLETON in Harris & Thomas.

Triplagnostus burgessensis Rasetti and *T. praecurrens* Westergaard may be synonyms p. 44, ÖPIK (3).

Triplagnostus gibbus var. *armata* Lerm. p. 86, *T. extumidus* L. p. 87, Chernysheva (2).

Triplagnostus pedrensis Rusc. text-fig. 21, *T. planus* R. text-fig. 22, Rusconi (2).

Triplagnostus sp. p. 167, ÖPIK in Elliston.

Tropidocoryphe barroisi p. 372, R. & E. Richter (2).

Tropidocoryphe barroisi (Maillieux) pl. i figs. 3-4, R. & E. Richter (3).

Tsinania ? recorded p. 65, Casey & Gilbert-Tomlinson.

Tungusella recorded p. 134, Repina et al.

Tungusella manica Repina MS [nom. nud.], *T. obesa* R. MS [nom. nud.] p. 270, Repina.

Typhloproctus aequalis (Meyer 1831) p. 159 pl. xli figs. 14-15, Weber (1).

Typhloproctus ? *granulineatus* sp. n. p. 250 pl. i figs. 12 a-6 text-fig. 1 Carboniferous (Lower) U.S.S.R. (Mugodzhur), Balashova Annu. Soc. paléont. russe 15 1956.

Typhloproctus microdiscus grygovensis subsp. n. [may be a geographical race] p. 83 (89) text-fig. Devonian (Middle) Czechoslovakia (Silesia), Štrnad Sborn. Sluko [A] 2 (for 1954) 1956.

Typhloproctus schindewolfi R. & E. Richter, *T. subcarintiacus* (Rud. R.), *T. pusillus* (Mstr.) p. 28, Müller.

Typhloproetus subcarintiacus R. Richter p. 217 text-fig. 12, **Lewowicki**.

Uncaspis micans Resser p. 20, **Lochman** in **Bridge**.

Urbanaspis gen. n. [Familia incerta, compared with *Aidarella*] p. 75 for type *U. notabilis* sp. n. p. 76 pl. ix figs. 7, 7a, 8, 8a, 8b Cambrian (Upper) U.S.S.R. (Kazakhstan), **Ivshin** Upper Cambrian trilobites of Kazakhstan Part I 1956.

Varvia gen. n. [tentatively Asaphidae] p. 212 for type *Symphysurus breviceps* Angelin 1854 lectotype selected and figured p. 213 pl. iii figs. 1-6 text-fig. 34C, *V. falensis* sp. n. including *S. b.* of Moberg & Segerberg 1906 p. 214 pl. iii figs. 7-9 text-fig. 34 B, *V. longicauda* sp. n. p. 215 pl. iii figs. 10-11 text-fig. 34 A Ordovician (Lower) Sweden, **Tjernvik** Bull. geol. Instn Univ. Upsala 36 2-3 1956.

Viñakainella spinulosa Rusc. transitionally preserved appendages recorded p. 35, **Rusconi** (2).

Volonellus granulatus Ivsh., *V. magnus* I. [not seen] p. 7, **Ivshin**.

Wanneria walcottana (Wanner) text-fig. 1E, *W. walcottana buelnaensis* **Lochman** referred to *Fremontia* as *F. b.* p. 58, *W. halli* Walcott type of *Fremontella* gen. n. p. 58, *W. mexicana prima* L. referred to *Laudonia* gen. n. as *L. p.* p. 61, *W. occidentis* W. assignment to *Esmeraldina* doubtful p. 61, **Harrington**.

Wanneria spp. recorded from N.W. Greenland p. 67, *W. nathorsti* Poulsen from Scotland p. 68, **Poulsen** (6).

Wanneriinae see *Laudonia* gen. n.

Waribole see *Cyrtosymbole*.

Weberopeltis see *Scutellum*.

Westergaardia spp. p. 52, **Henningsmoen** (3).

Weymouthia nobilis (Ford) listed p. 1354, **Lochman** (2).

Whittingtonia **Prantl** & **Pribyl** 1949 referred to Miraspininae p. 248, *W. bispinosa* (M'Coy) text-figs. 17A-C, **Whittington** (1).

Whittingtonia bispinosa (M'Coy 1846) p. 516 pl. lix figs. 4-5, 7-8, **Whittington** (3).

Whittingtonia sp. nov. [undescribed] p. 267, **Kielan**.

Wilbernia see *Olentella* gen. n.

Wilbernia Walcott 1924 referred to Idahoiidae fam. n. p. 459, considered ancestral to Dikelocephalidae p. 449 text-fig. 2, **Lochman** (1).

Wilbernia sp. p. 22, **Palmer** (1).

Wuhuia belus (Walcott) may be a late sp. of *Conaspis* p. 450, **Lochman** (1).

Wutingia Endo 1935 non Melichar 1926 renamed *Endoaspis* nom. n. p. 448, **Lochman** (1).

Wutingia Endo 1935 discussed and referred to Kaolishaniinae p. 14, *W. rectangulosa* E. lectotype refigured p. 15 pl. ii figs. 1a-b (drawings), 5a-9, **Kobayashi** (1).

Xenocheilos cf. *X. spineum* Wilson p. 560 pl. lxx figs. 4 pars, 6 pars, 13, **DeLand** & **Shaw**.

Xenocheilos cf. *X. spineum* p. 42, **Shaw** & **DeLand**.

Xenocheilos sp. p. 22, **Palmer** in **Nolan et al.**

Xenostegium belemnura p. 27, **Nolan et al.**

"*Xenostegium*" *taurus* of Ross 1951 (non Walcott) referred to *Aulacoparia* (A.) gen. n. p. 53, **Hintze** & **Jaanusson**.

Xystridura Whitehouse—*X. browni* (Etheridge) excluded p. 40; *X.* (undescribed) recorded p. 40, "*X.*" *browni* and *X. aff. b.* p. 41, **Öpik** (3).

Xystridura recorded p. 41, **Traves** (1).

Xystridura recorded p. 83, **Traves** (2).

Xystridura aff. *browni* (Eth.) p. 66, **Casey** & **Gilbert-Tomlinson**.

Xystridura warramunga n. sp. [nom. nud.] p. 32, **Öpik** in **Ivanac**.

Xystridura several spp. p. 17, **Öpik** (2).

Yanquetruzia chupina Rusc. p. 119, **Rusconi** (3).

Yanquetruzia curvata Rusc. pl. i fig. 3, *Y. chupina* R. pl. i fig. 17, **Rusconi** (2).

Yorkella australis (Woodward) pp. 108, 130, **Daily**.

Yoyarria puelchana Rusc. pl. x fig. 13, **Rusconi** (2).

Yüpingia gen. n. [Asaphidae] p. 369 (377) for type *Y. niobiformis* sp. n. p. 371 (378) pl. i figs. 6-13 Cambrian (Upper) China (Kweichow), **Lu** *Acta palaeont. sinica* 4 3 1956.

Zacanthoides spinosus (Walcott) p. 12, **PALMER** in **Nolan et al.**

Zbirovia gen. n. [Illaeninae] p. 489 (528) for type *Illaenus aratus* Barrande 1872 lectotype chosen with synonyms *I. perneri* Klouček 1913 and *I. p.?* var. *glabra* K. 1916 p. 490 pl. i figs. 5-7 text-fig. 1 Ordovician (Middle) Bohemia, **Šnajdr** *Sborn. úst. Úst. geol.* 22 [Pal.] 1956.

Zdicella Šnajdr MS [nom. nud.] p. 490, **Šnajdr**.

Zeliskella hawlei (Barrande) lectotype chosen p. 514 pl. ii figs. 5-6, **Šnajdr**.

Cranidium A p. 560 pl. lxiv fig. 7, Cranidium B p. 561 pl. lxvii figs. 7-8, Cranidium C p. 561 pl. lxvii figs. 11-13 Cambrian (Upper) U.S.A. (Wyoming), **DeLand & Shaw**.

Gen. et sp. indt. [pygidium] p. 146 pl. x fig. 6 Devonian Japan (Gifu), **Kobayashi & Igō**.

Gen. et spec. indet. II of Winsnes 1955 is apparently identical with *Olenellus* ? sp. II Poulsen 1932 p. 67, **Poulsen** (6).

Genus and species indet. [Asaphidae] p. 258 pl. x figs. 7-8 Ordovician (Lower) Sweden, **Tjernvik**.

Genus and species undetermined Cambrian (Middle) U.S.A. (Arizona) p. 22ff., **Palmer** (1).

N. gen. [undescri.] aff. *Aphelaspis* p. 2497 pl. i fig. 3 Cambrian (Upper) U.S.A. (Nevada), **PALMER** in **Palmer & Hazzard**.

N. gen. and sp. [undescri.] aff. *Lychas* [sic] sp. Ordovician (Middle) U.S.A. (Tennessee) p. 155, **Neuman**.

Pygidium A p. 561 pl. lxiv figs. 17-18 Cambrian (Upper) U.S.A. (Wyoming), **DeLand & Shaw**.

Trilobita sp. ind. p. 50, **Bierther**.

Trilobite fragments p. 2089, **Lanzenheim et al.**

Trilobite (Mississippian) recorded p. 10, J. M. **WELLER** in **Gilluly et al.**

Undescribed genus listed p. 42 Cambrian (Middle) U.S.A. (Wyoming), **Shaw & DeLand**.

Unidentified trilobites p. 1457 ff., **Oliver**.

TRACE-FOSSILS ATTRIBUTED TO TRILOBITES

Grossochorda sp. [ascribed to Ptychopariidae] p. 362 pl. xix fig. 2, text-figs. 5 (9-12) Cambrian (Lower) Pakistan (Salt Range), **Seilacher**.

Cruziana ancora forma n. Silurian French Equatorial Africa p. 44 pl. iii figs. 2-6, **Lessertisseur** (2).

Dimorphichnus obliquus gen. et sp. n. [ascribed to *Redlichia noettingi*] p. 346 pl. xvii figs. 1-2, pl. xviii figs. 1-2 text-figs. 1g, 2-3 Cambrian (Lower) Pakistan (Salt Range), **Seilacher**.

Diplichnites sp. [ascribed to *Redlichia noettingi*] pl. xvi fig. 3 text-figs. 1b-d, f Cambrian (Lower) Pakistan (Salt Range), **Seilacher**.

Protichnites sp. A p. 355 pl. xvi fig. 2, P. sp. B p. 356 pl. xvi fig. 1 text-fig. 4 [both ascribed to Ptychopariidae] Cambrian (Lower) Pakistan (Salt Range), **Seilacher**.

Rusophycus didymus (Salter) [ascribed to Ptychopariidae] p. 358 pl. xvi fig. 2, pl. xix fig. 1, pl. xx figs. 1, 3, text-figs. 5 (4-6), *R. bilobatus* (Vanuxem) [ascribed to *Redlichia noettingi*] p. 363 text-fig. 5 (3) Cambrian (Lower) Pakistan (Salt Range), **Seilacher**.

